

# **EXHIBIT 23**

Control Number : GOOG-DOJ-03901903

All Custodians : Bashar Kachachi, Brad  
Bender, George Levitte, Haskell  
Garon, Jim Giles, Pooja Kapoor,  
Sam Cox

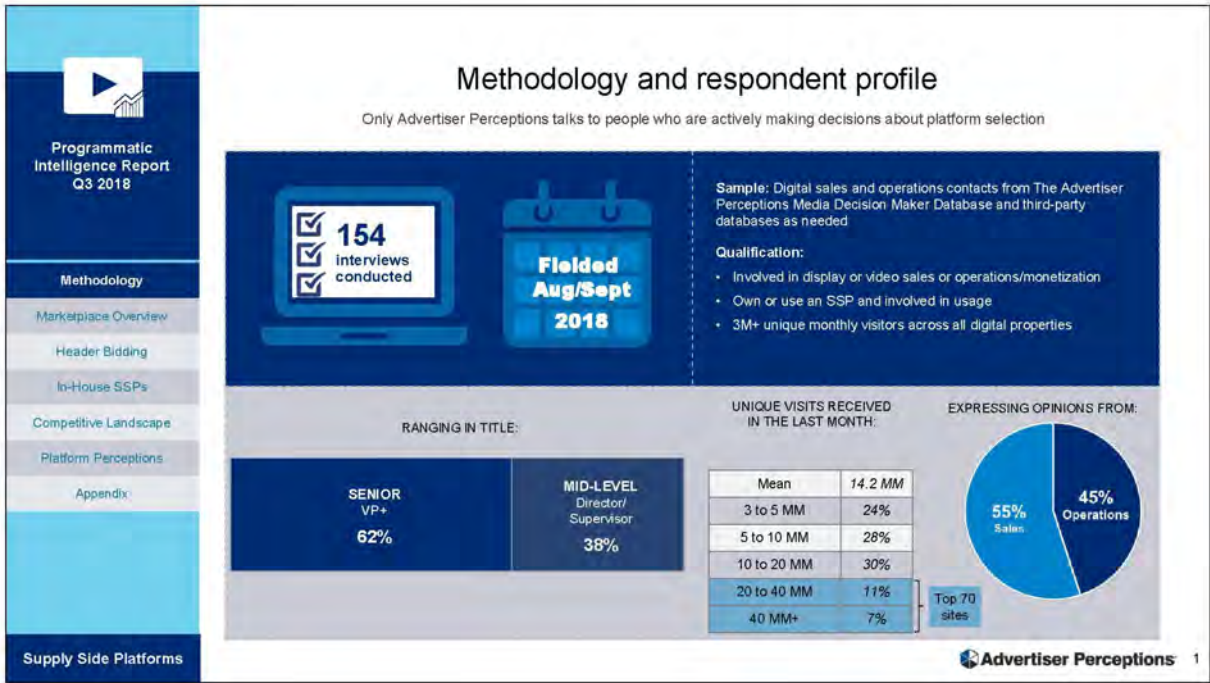
Custodian : Brad Bender

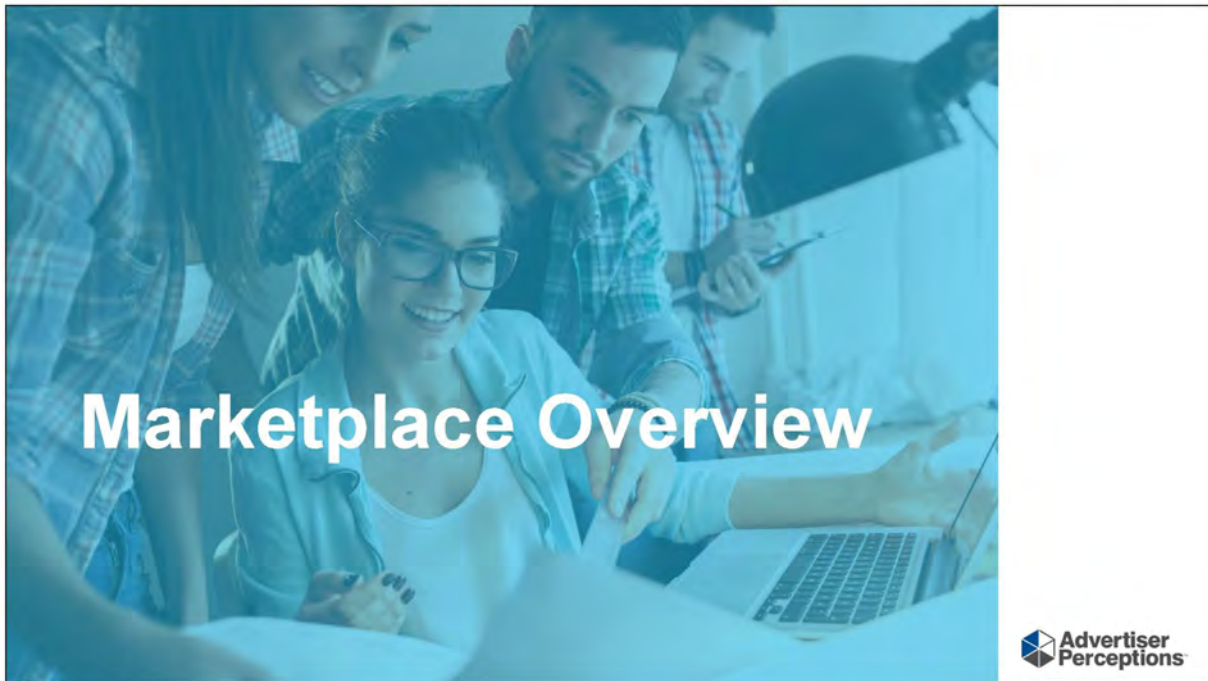
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Date/Time Sent :

MODIFICATION DATE : 1/28/2019 10:41 PM

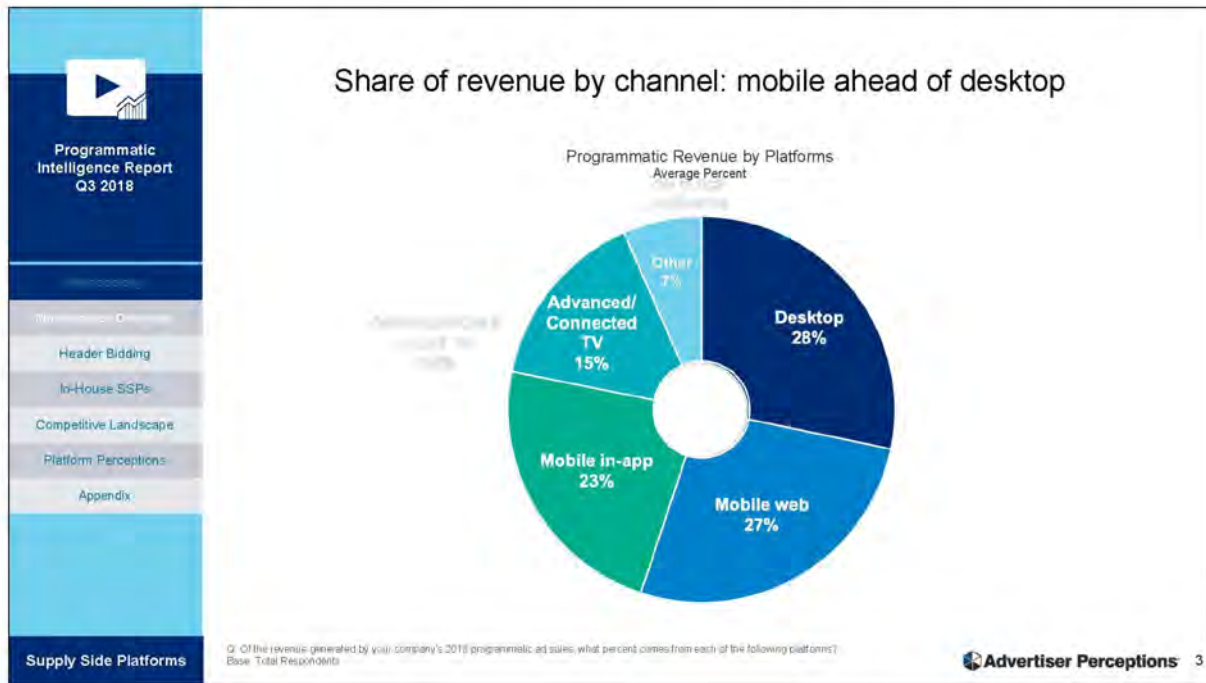
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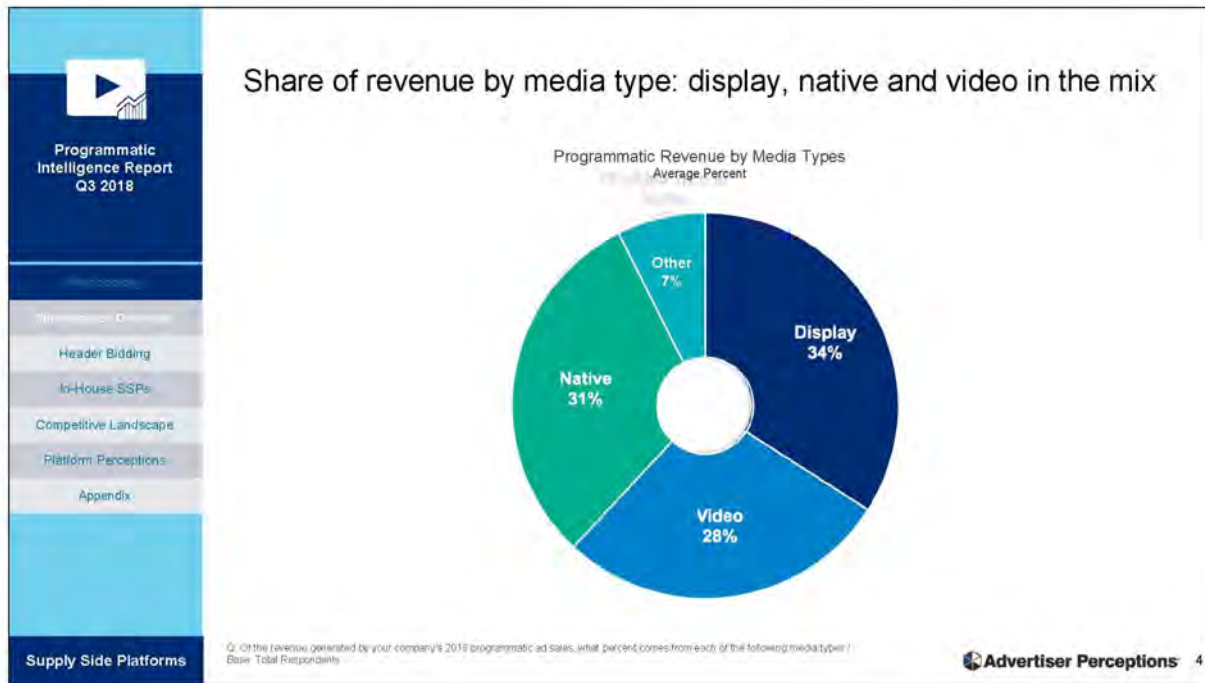


# Marketplace Overview

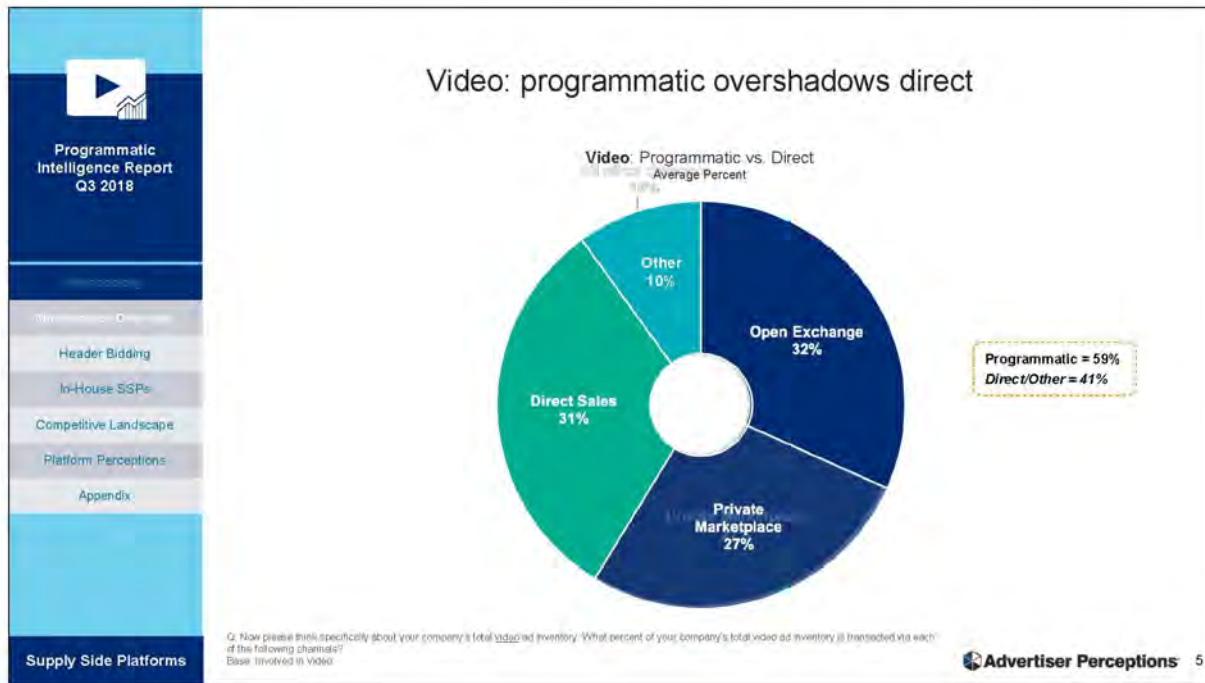
 Advertiser  
Perceptions



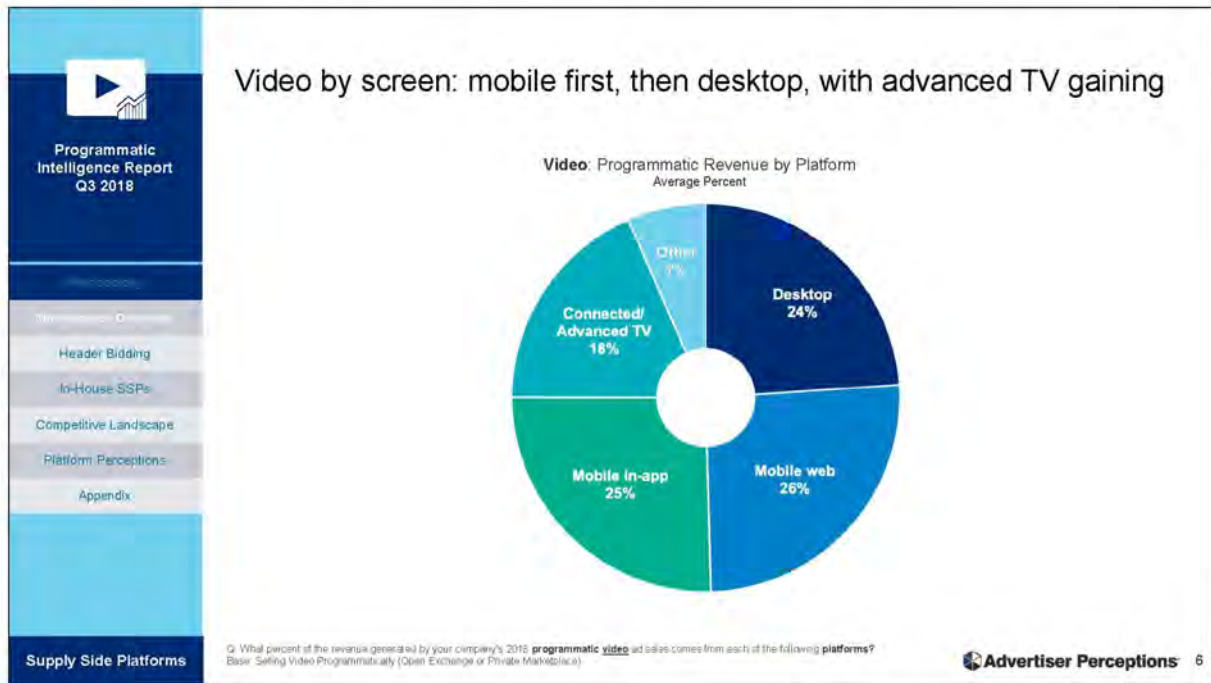
Q10b, Q10c



Q10b, Q10c



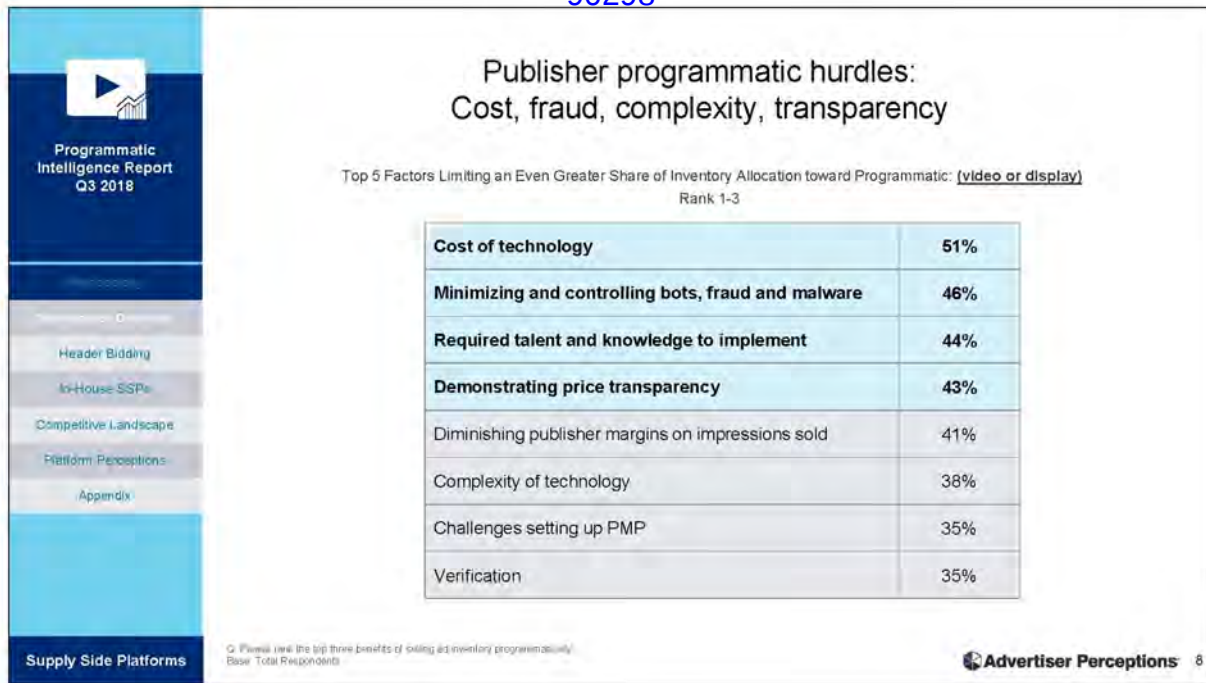
Q11a, Q11b



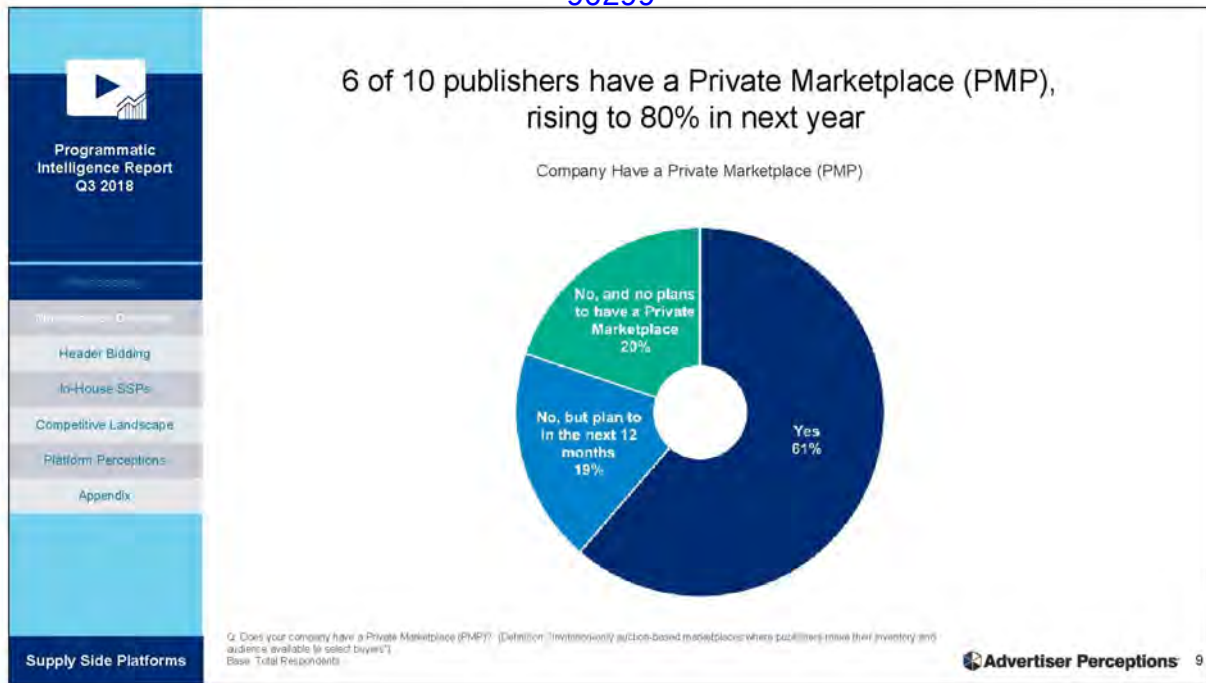
Q11a, Q11b



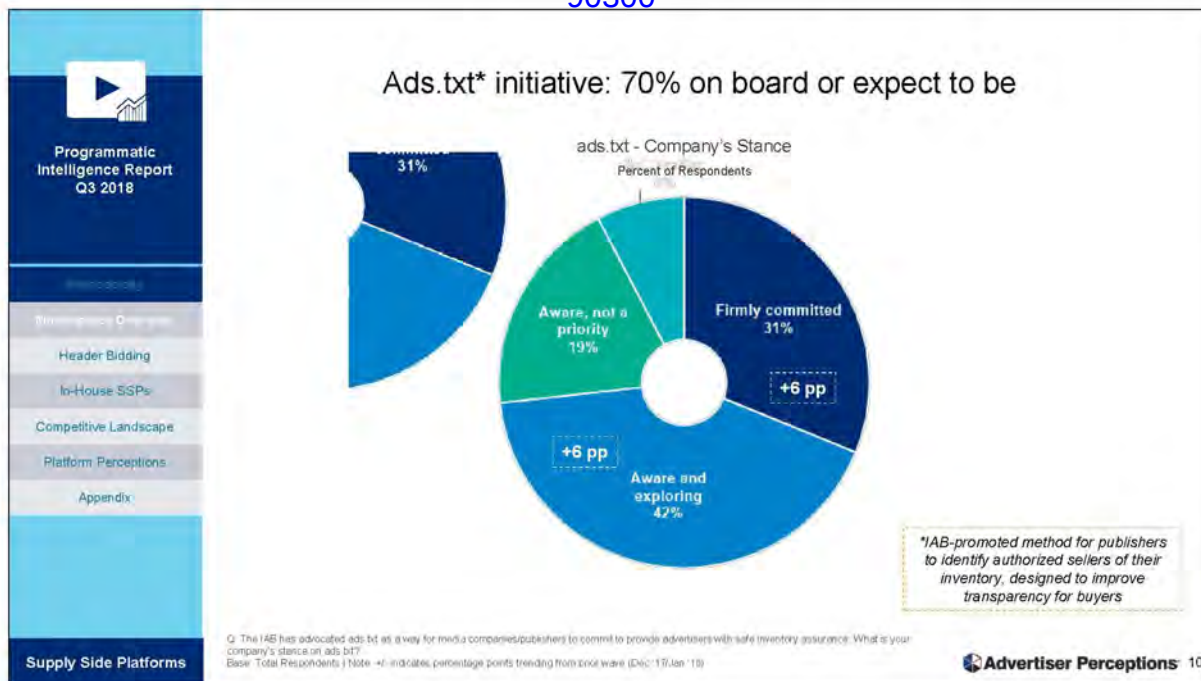
Q15a



Q15a

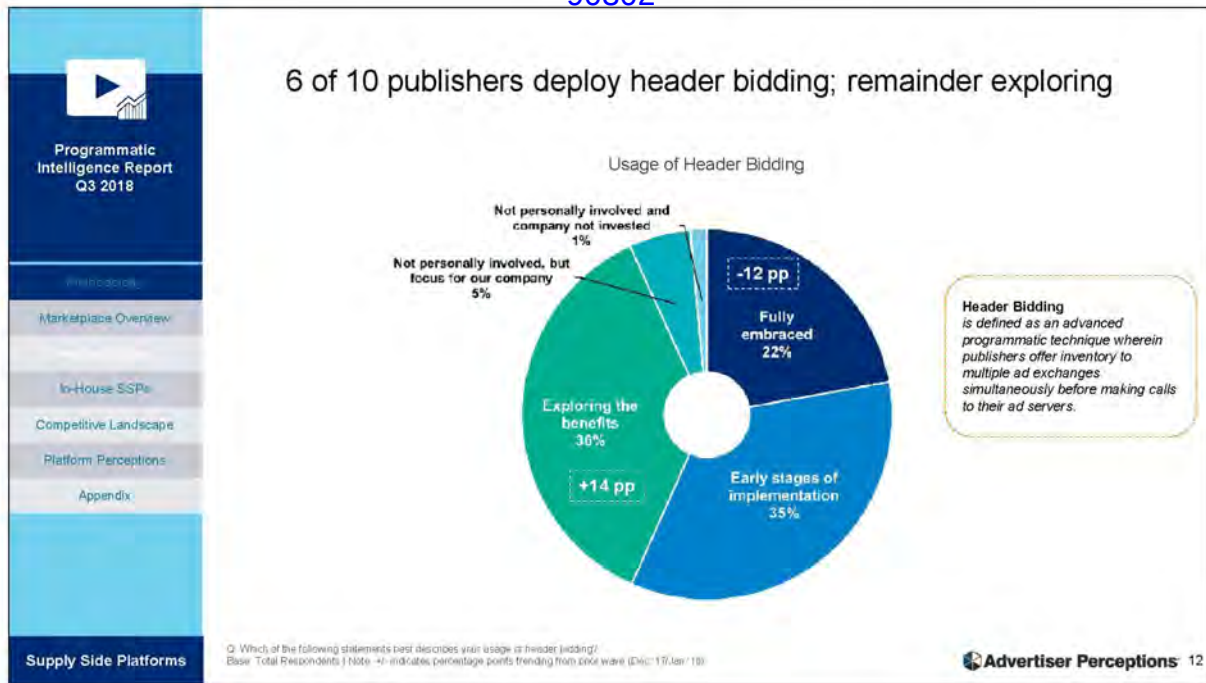


Q16a



Q80






Q40



Q45



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Marketplace Overview

Header Bidding

In-House Sells

Competitive Landscape

Appendix

Supply Side Platforms

## Key Google findings from SSP Report, Wave 2

Strengths to leverage:


- Familiarity, past usage, preference
- Track record, protection against bots
- Superior tech vision
- Communication, coverage, presence with publishers

Red Flags to address:

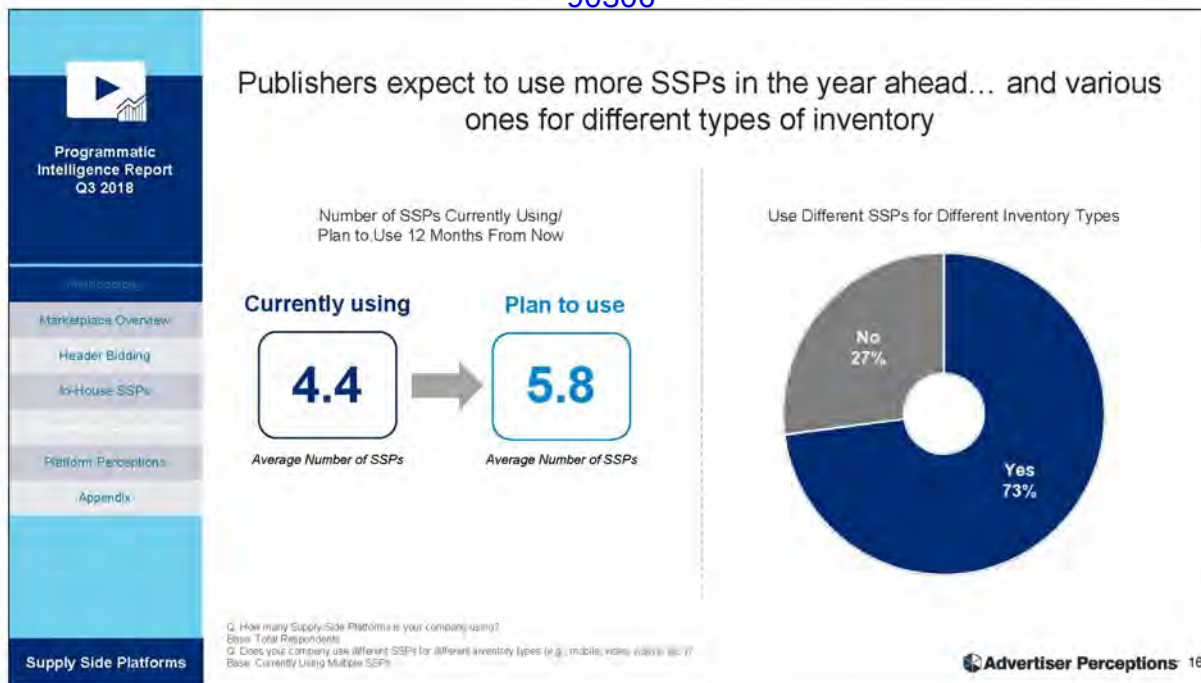
- Reporting
- PMP capabilities
- Header bidding capabilities
- Proactive partnership & alignment with pub goals

Who are you competing with?

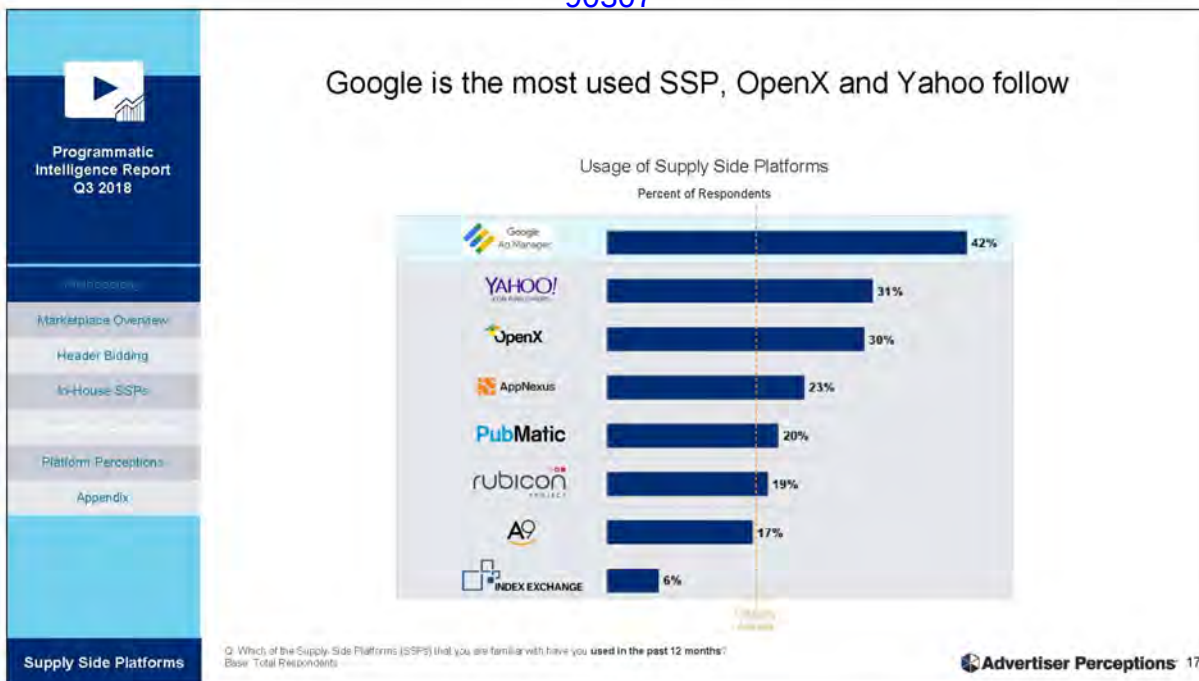
- In house initiatives?
- A blur of alternatives, including:
- Pubmatic, Rubicon re-emerging as stronger players
- AppNexus, especially post Xander

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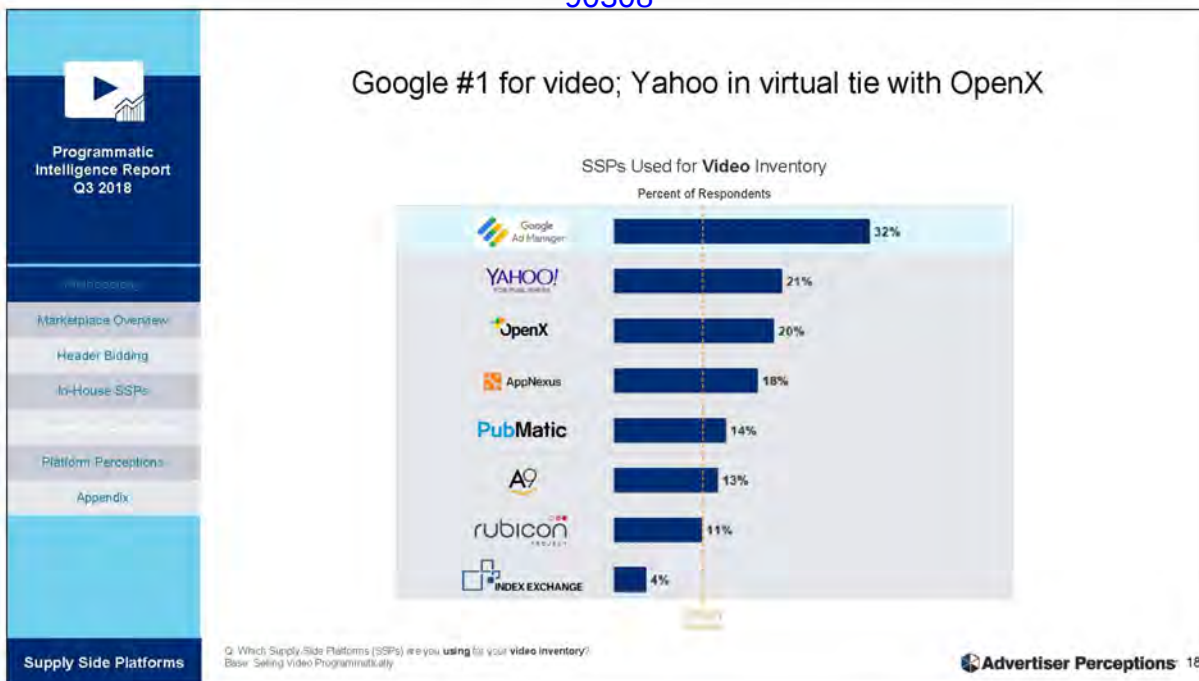




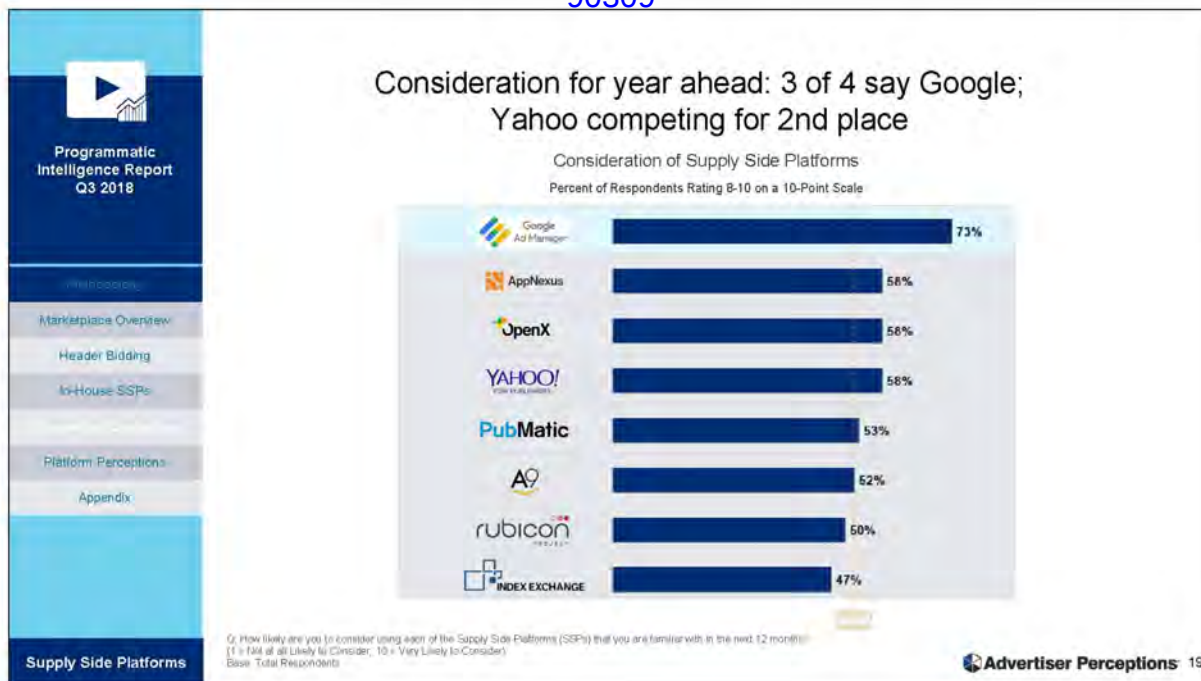
Q50, Q55



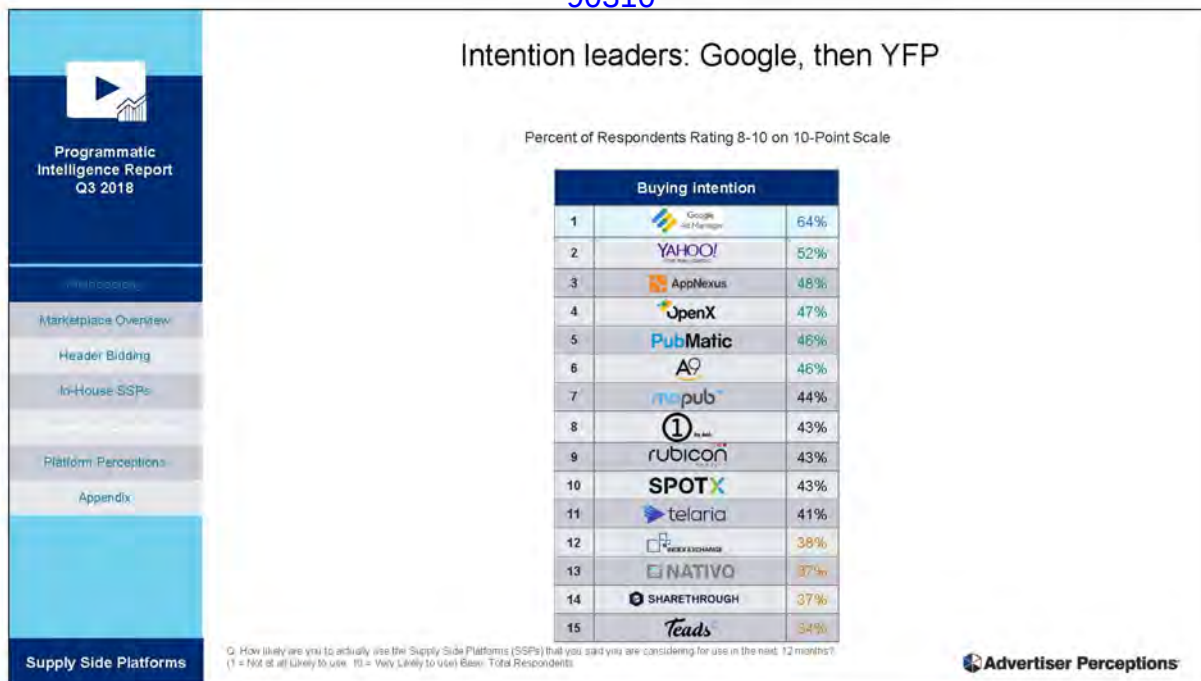
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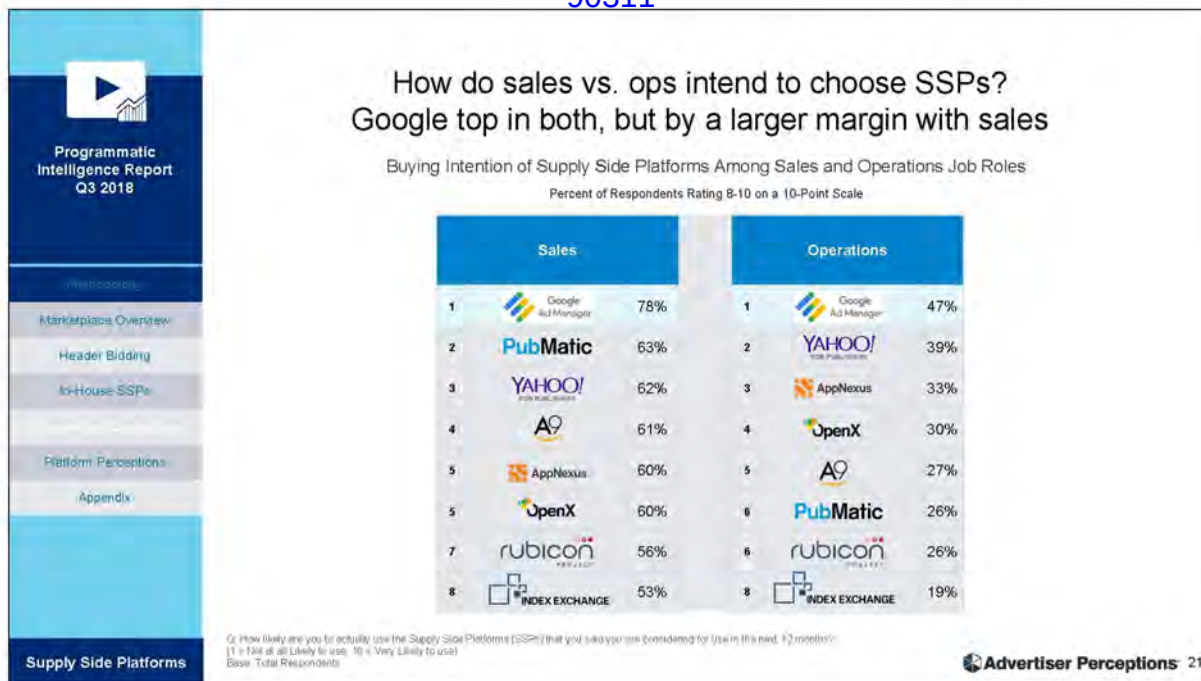
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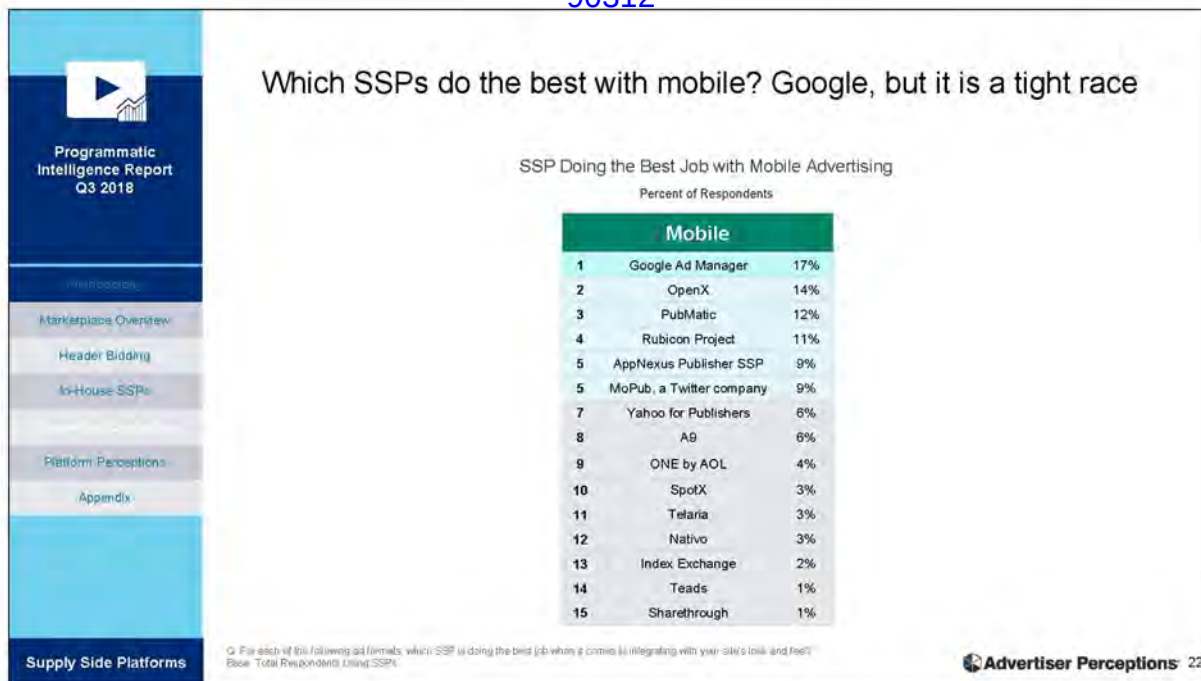
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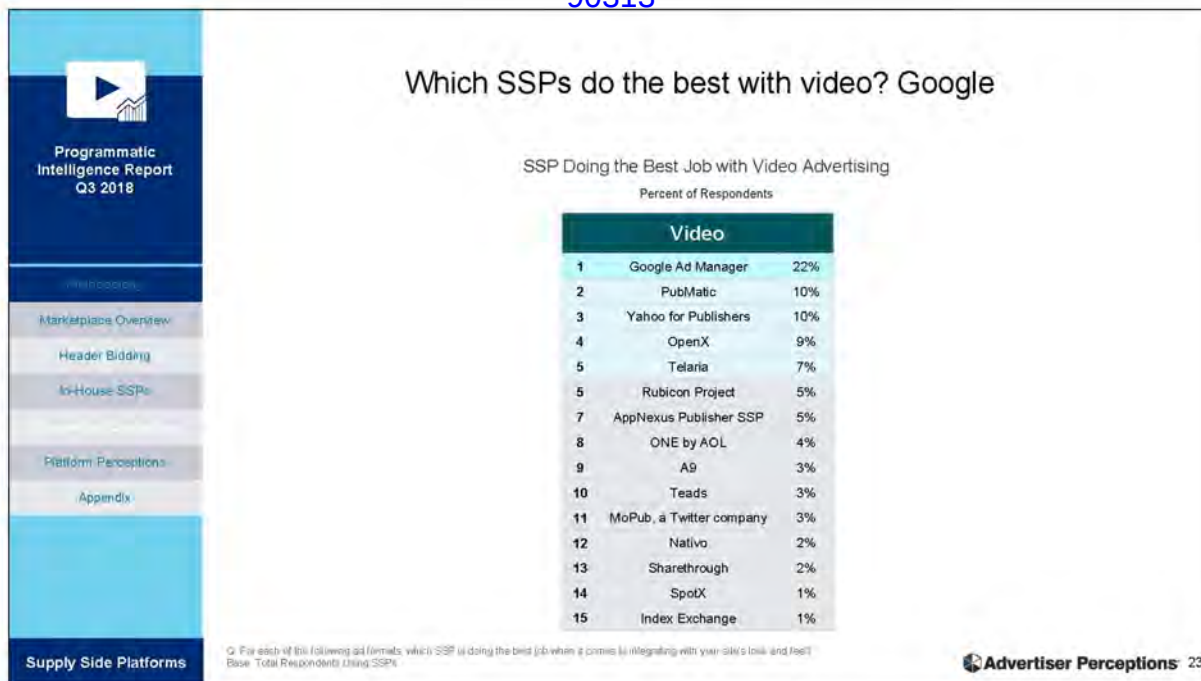
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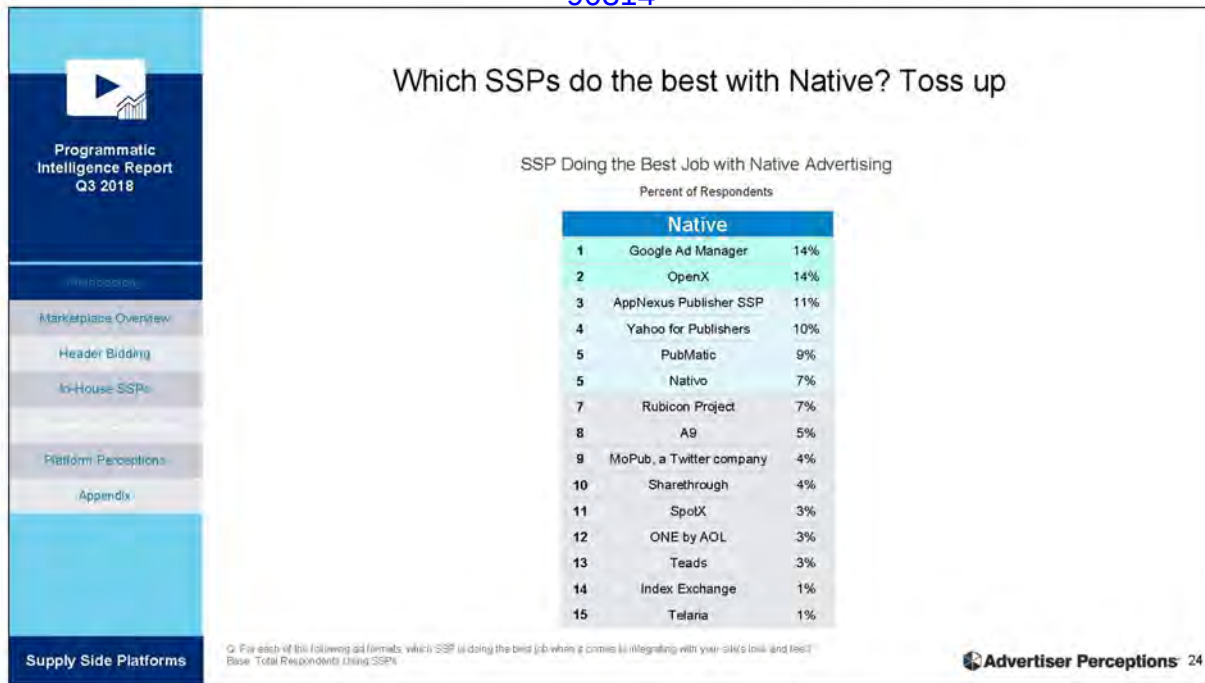
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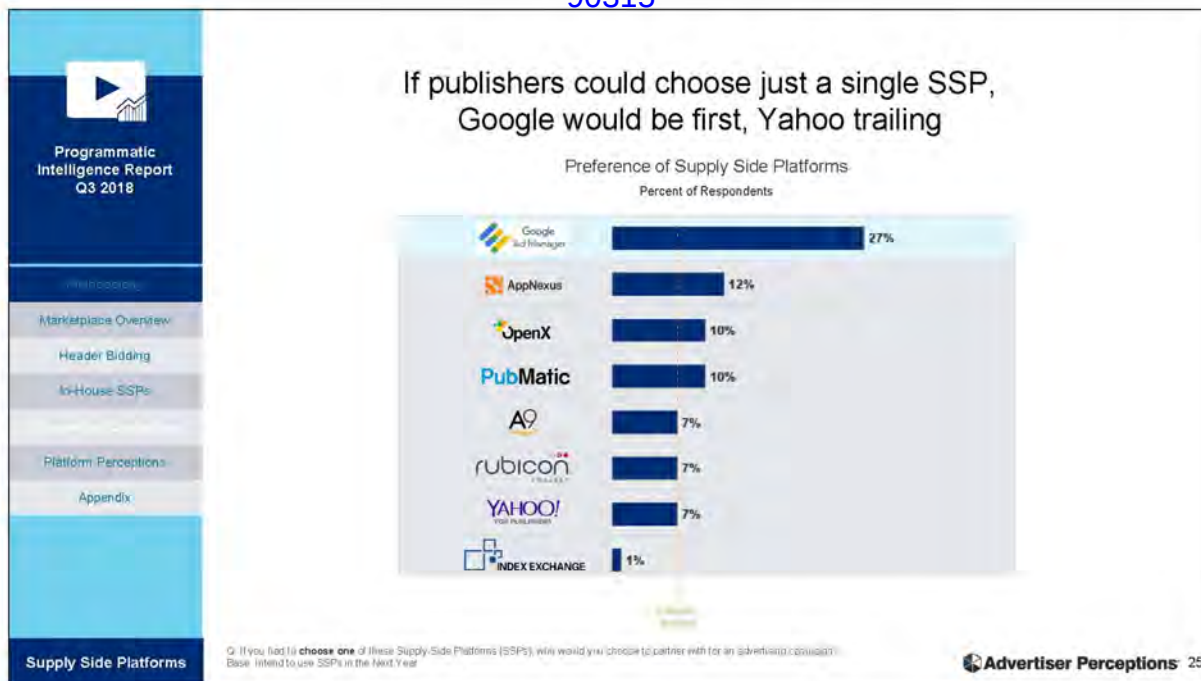
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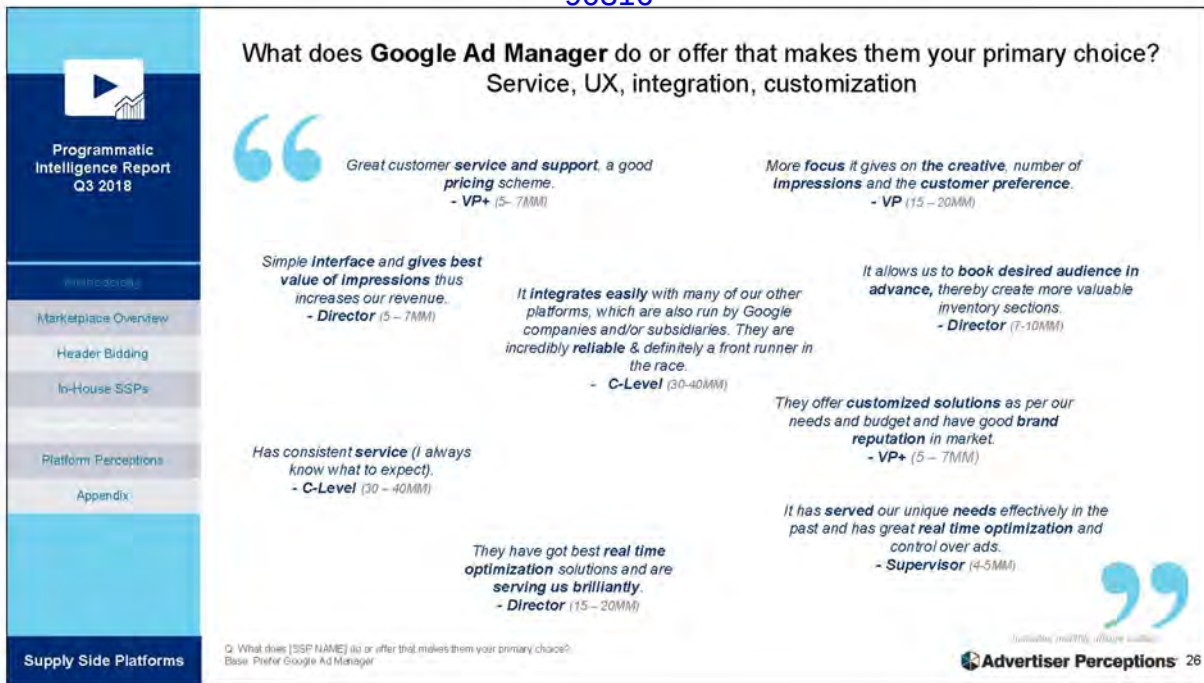
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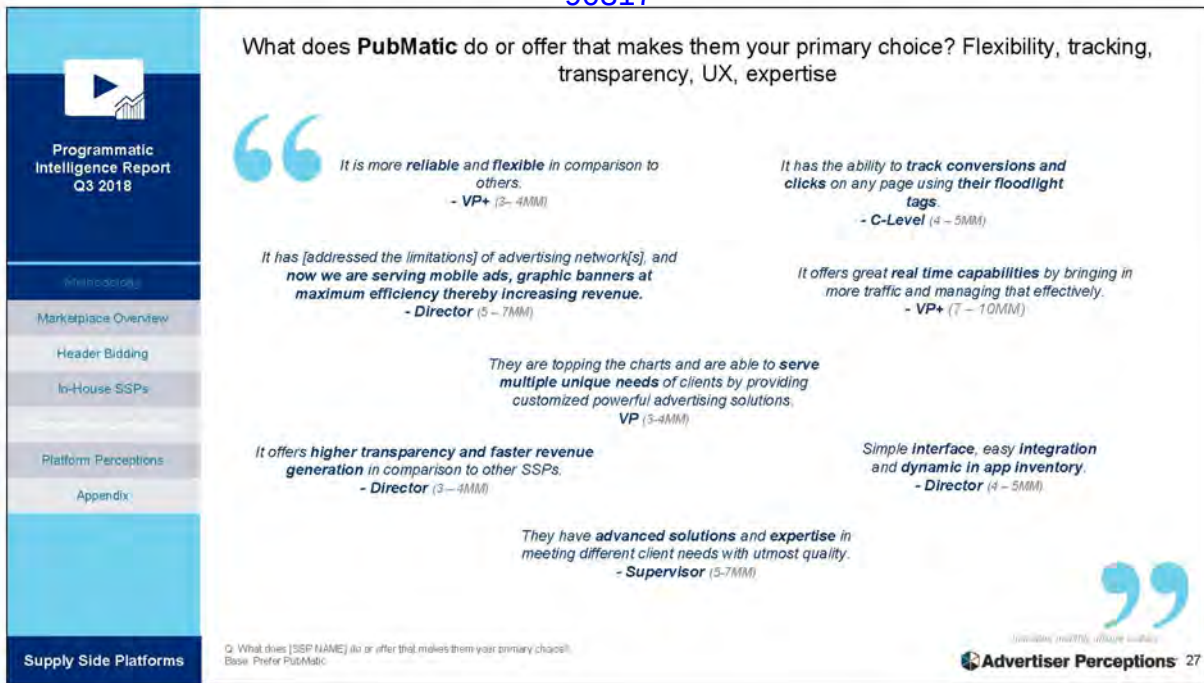
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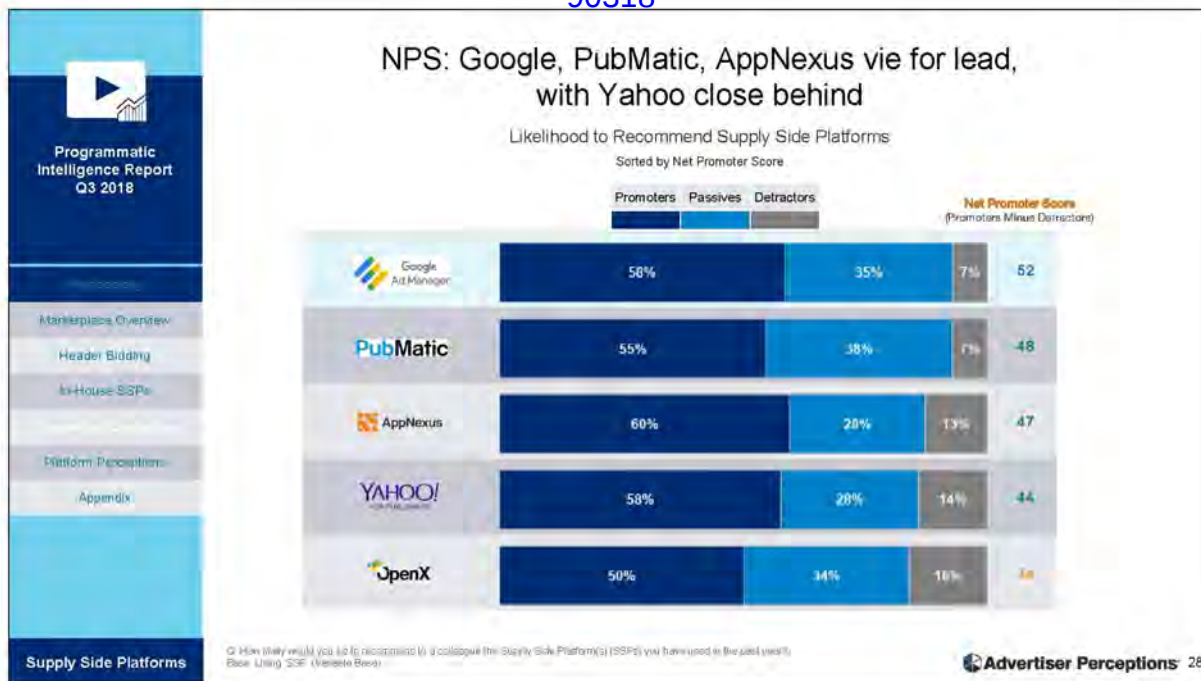
Q126



Q127




Q127



Q130

BASE SIZES: Google Ad Manager (formerly DoubleClick Ad Exchange) 65 Yahoo for Publishers (including BrightRoll) 47 OpenX 46 AppNexus Publisher SSP 35 MoPub, a Twitter company 33 PubMatic 31 Rubicon Project 29 A9 27 Nativio 24 SpotX 24 Telaria (formerly Tremor Video) 24 ONE by AOL (including Millennial Media, Adap.tv, Marketplace) 16 Sharethrough 13 Teads 13 Index Exchange 9





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Marketplace Overview

Header Bidding

In-House SSPs

Competitive Landscape

Appendix

**Supply Side Platforms**

## We ask publishers to evaluate SSPs in 4 categories, across 28 criteria

**Performance Capabilities Criteria:**

1. Access to demand (e.g., introductions to advertisers/agencies and proprietary demand)
2. Auction dynamics (e.g., first price, second price, floor pricing automation & soft floors etc.)
3. Track record of protection against bad ads, bots, fraud
4. Analytics providing key metric performances on pricing, campaign effectiveness, new advertisers, etc.
5. Availability of reporting (i.e. quantity and frequency of updates)
6. ROI measurement/optimization across devices

**Platform Capabilities Criteria:**


1. Ability to deliver native, video and mobile formats that integrate with our site's look and feel
2. Auditing tools for control over ad placement
3. Data available in the platform (impression level auction data, advertiser and bid transparency, etc.)
4. Flexibility of integration with our systems
5. Visibility into accurate, available inventory
6. Viewability measurement
7. PMP capabilities
8. Header bidding capabilities
9. Ease of use

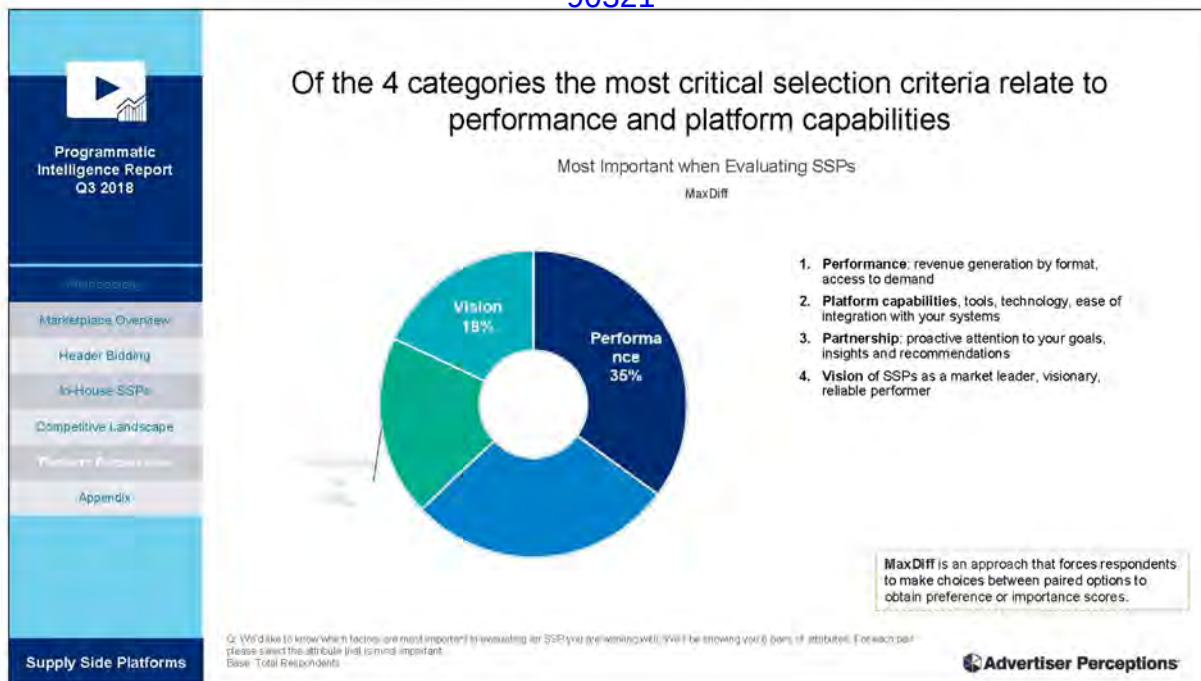
**Partnership Criteria:**

1. Alignment with publisher goals and needs
2. Is easy to work with
3. Sales skills (listening, attentiveness, negotiating, etc.)
4. Technology expertise
5. Proactively share reports, analytics and insights that enable us to make better decisions
6. Make it easy for us to find the solutions or answers we need
7. Transparent and fair in fee structure
8. Operates with integrity - open, fair, honest, working toward a win/win relationship

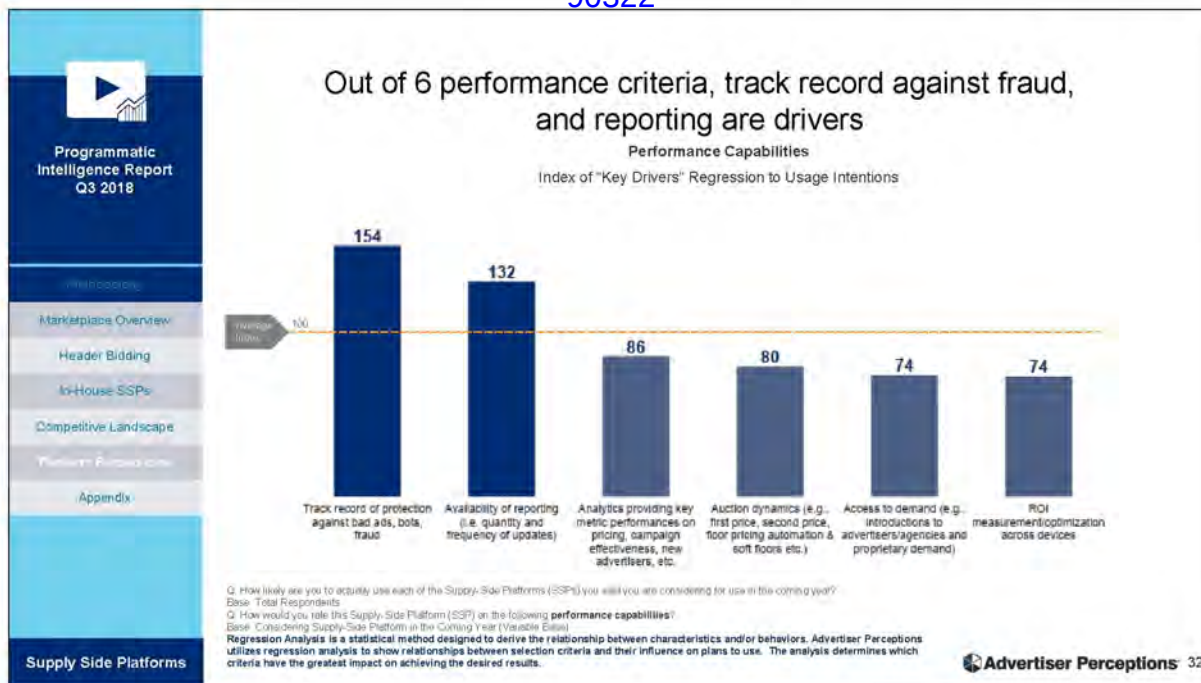
**Vision Criteria:**

1. A market leader
2. Successful - competent and stable in managing their business
3. Superior technology vision
4. Integrity as a company in their behavior in the market and in their dealings with clients
5. Inspire confidence that our company will succeed in partnership with them

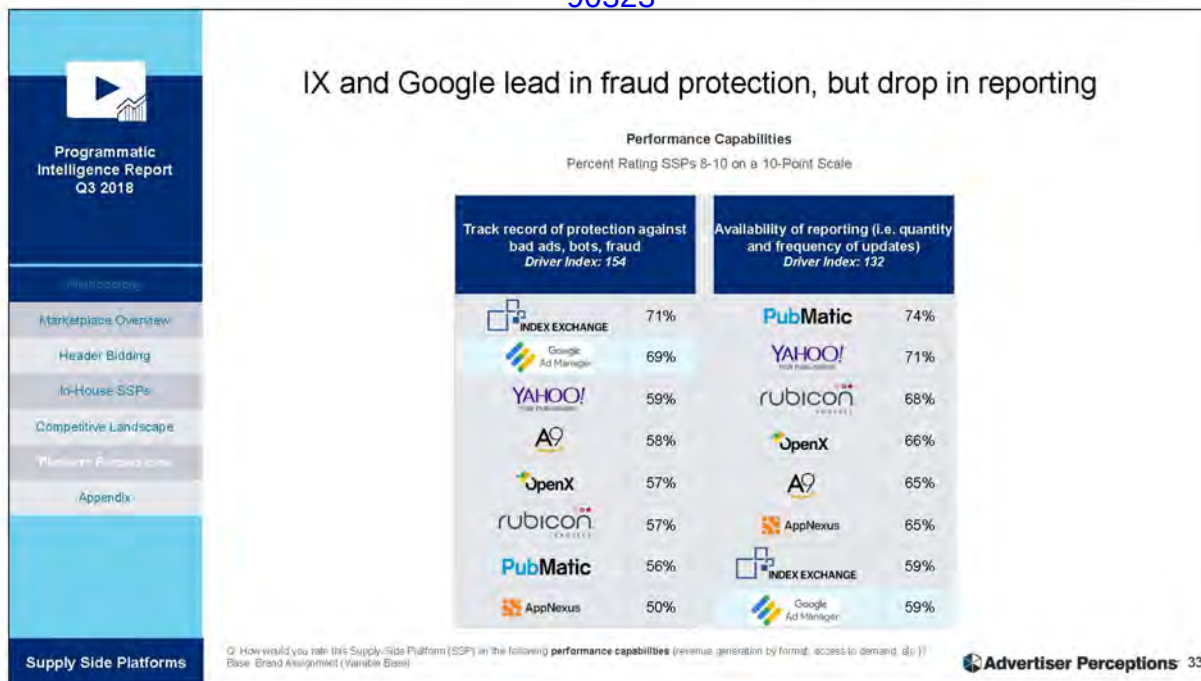




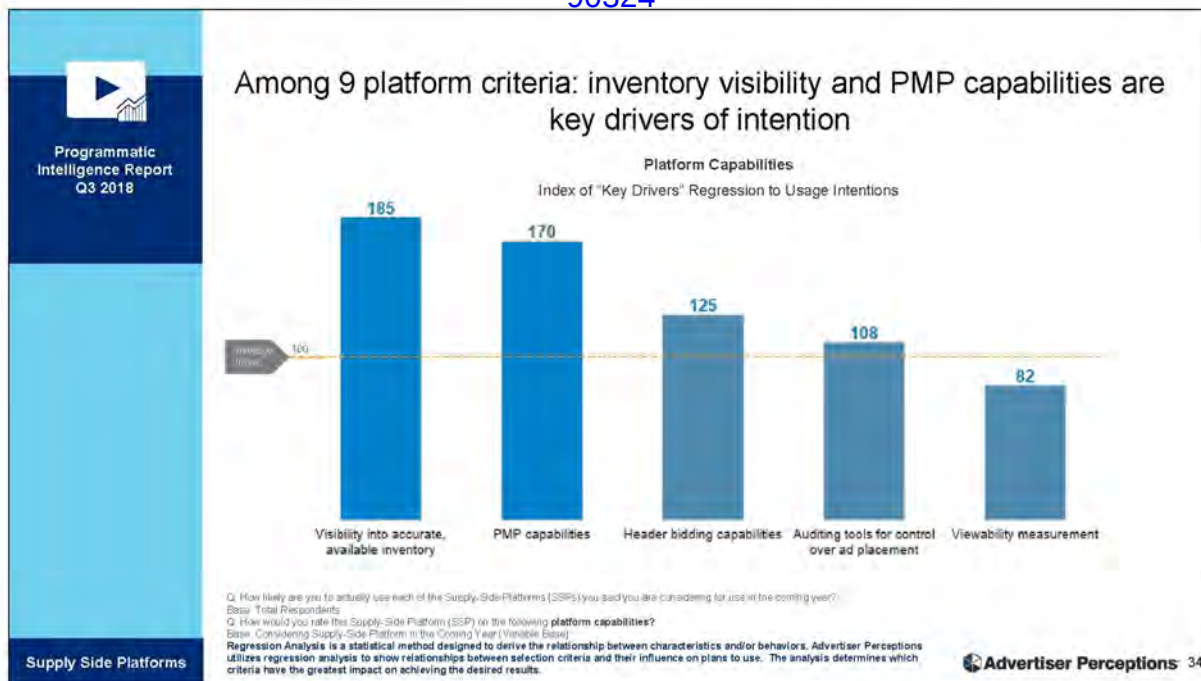
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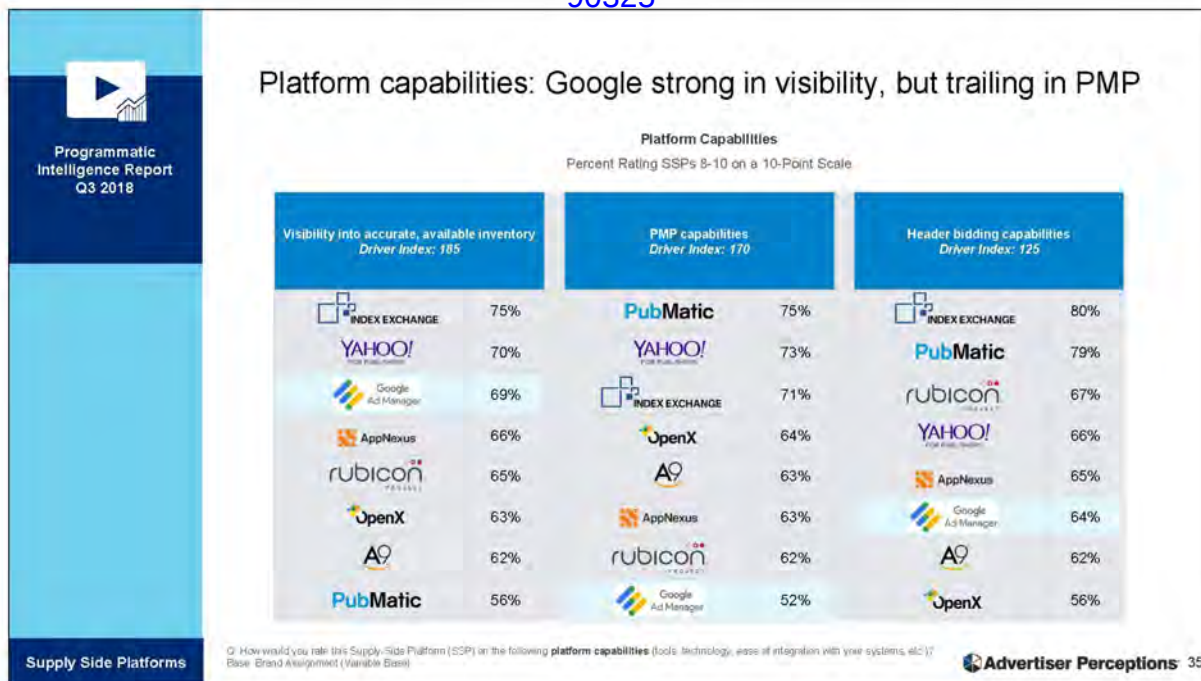
Q140



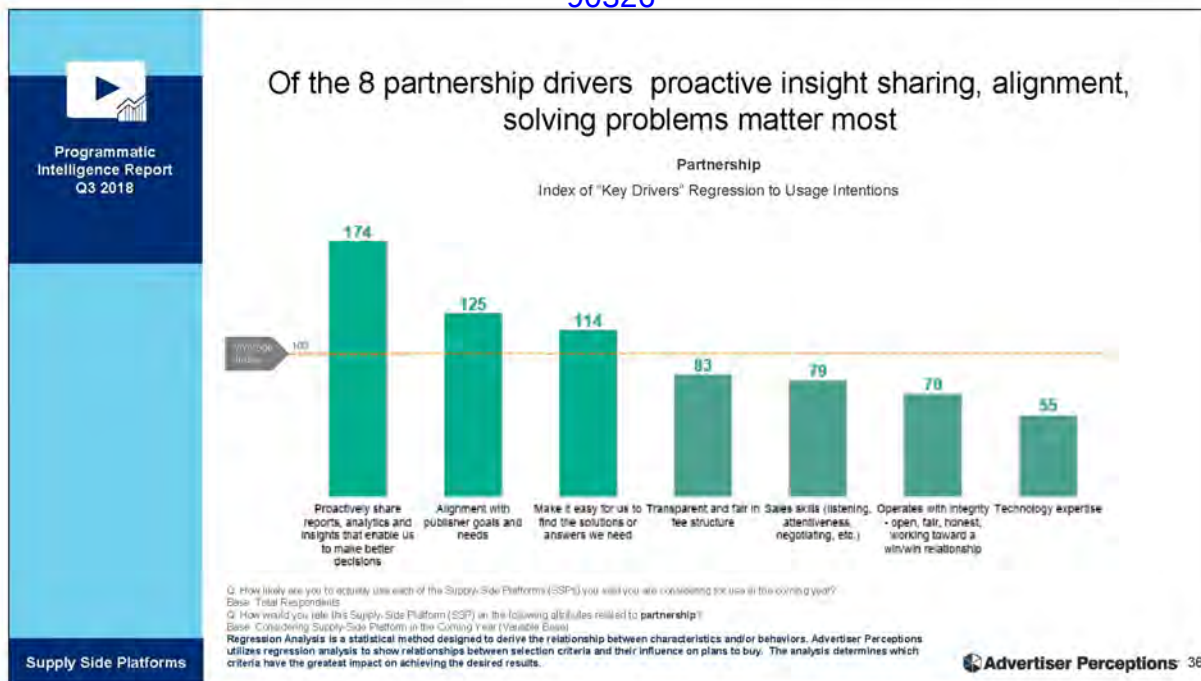
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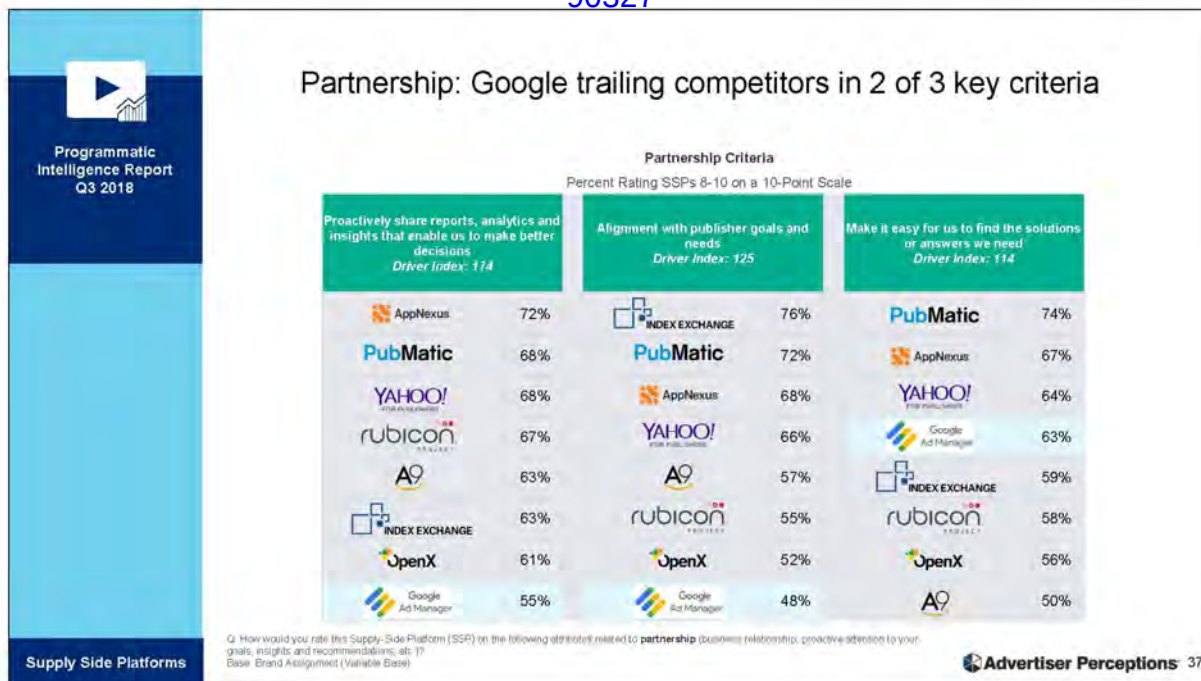
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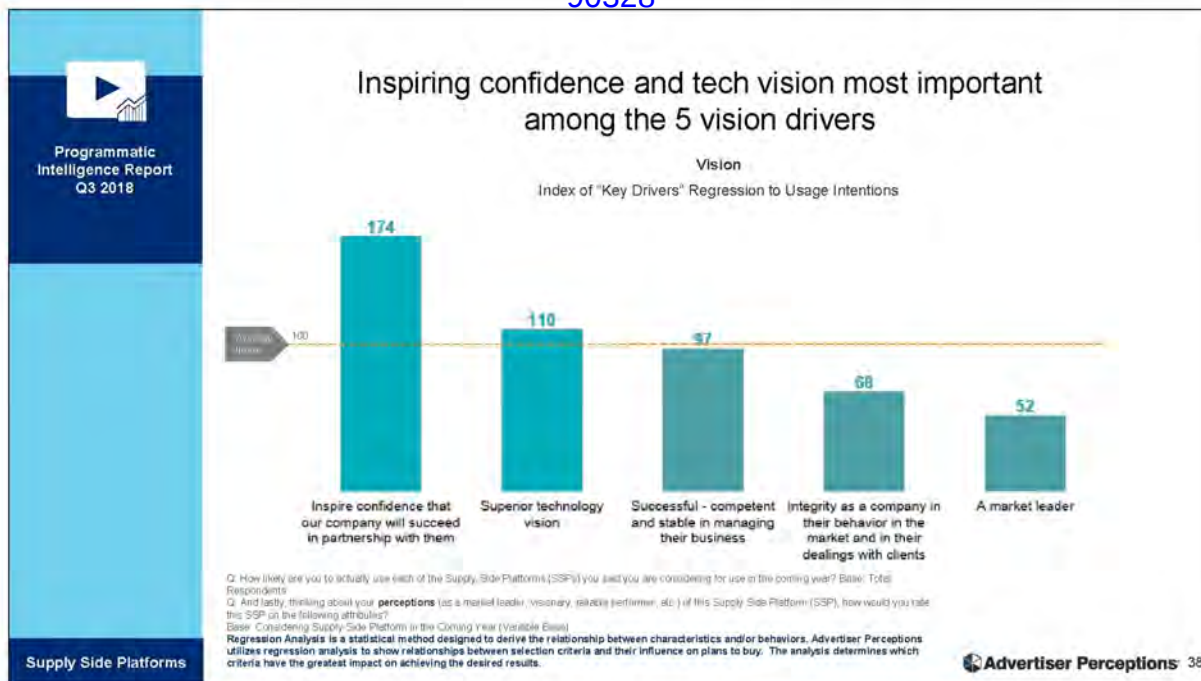
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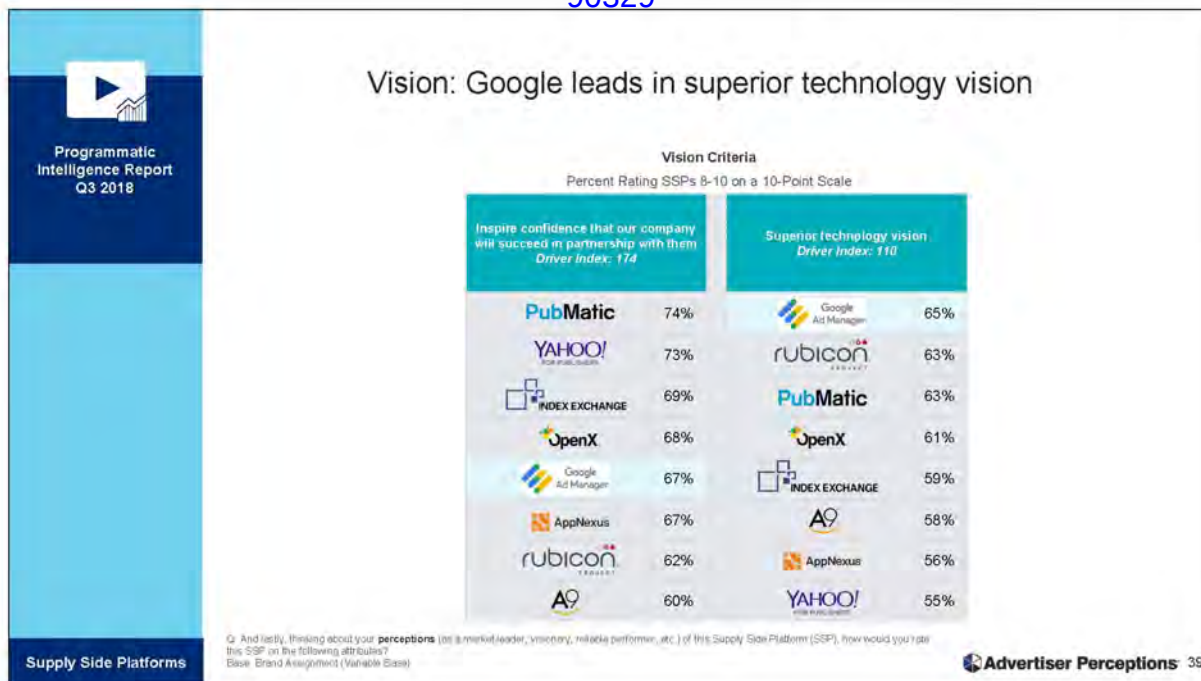
Q145



Q145



Q150



Q150



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- Header Bidding
- In-House SSPs
- Competitive Landscape
- Platform Capabilities
- Appendix

**Supply Side Platforms**

## The 5 key criteria across the categories of performance, capabilities, partnership, and vision

- Performance Capabilities Criteria:** Track record of protection against bad ads, bots, fraud
- Platform Capabilities Criteria:** Visibility into accurate, available inventory
- Platform Capabilities Criteria:** PMP capabilities
- Partnership Criteria:** Proactively share reports, analytics and insights enable better decisions
- Vision Criteria:** Inspire confidence that our company will succeed in partnership with them

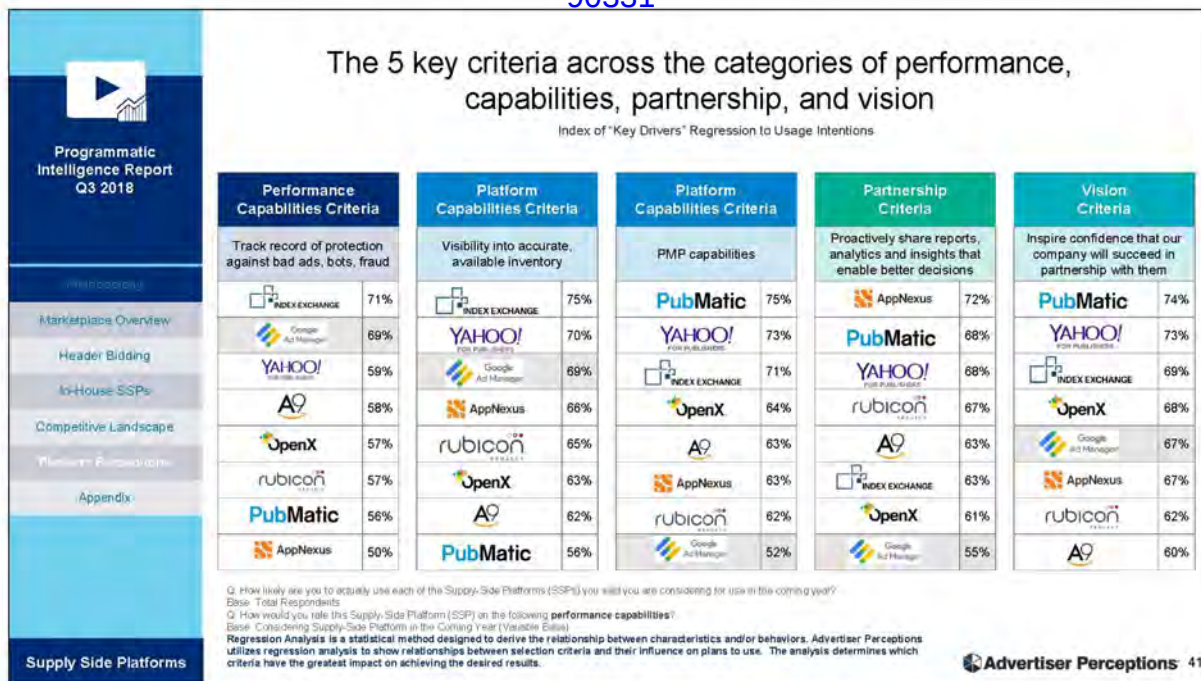
Q: How likely are you to actually use each of the Supply-Side Platforms (SSPs) you said you are considering for use in the coming year?  
Base: Total Respondents

Q: How would you rate this Supply-Side Platform (SSP) on the following **performance capabilities**?  
Base: Considering Supply-Side Platform in the coming year (Variable Base)

Regression Analysis is a statistical method designed to derive the relationship between characteristics and/or behaviors. Advertiser Perceptions utilizes regression analysis to show relationships between selection criteria and their influence on plans to use. The analysis determines which criteria have the greatest impact on achieving the desired results.

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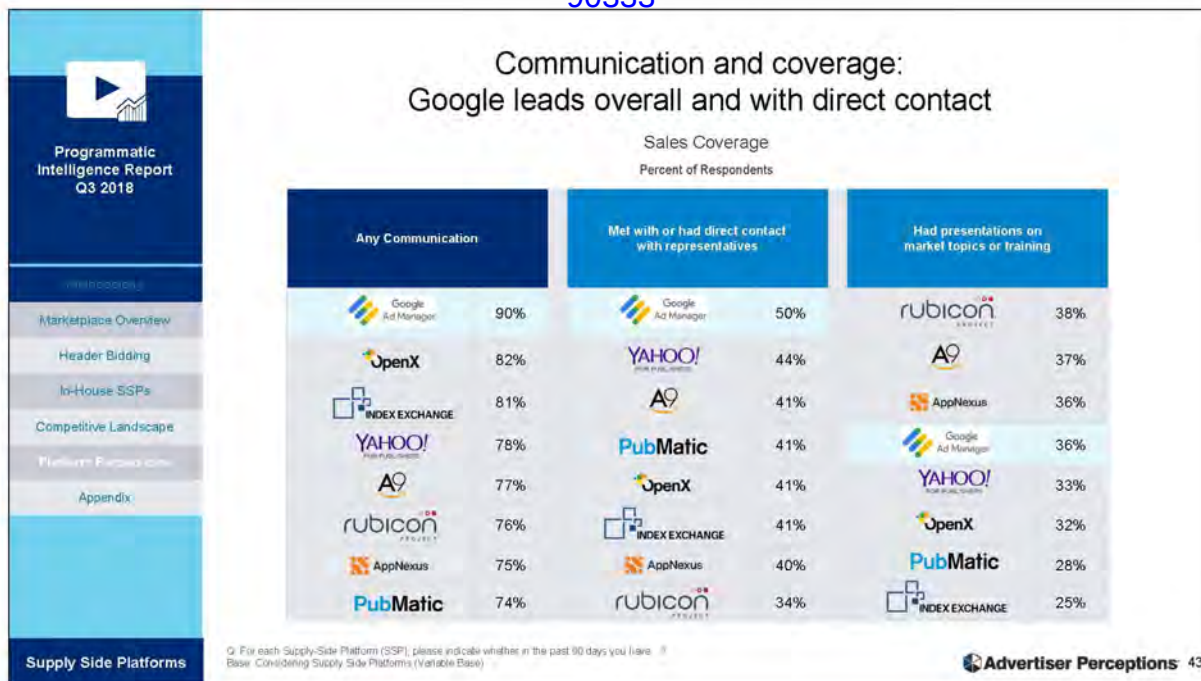
Q140




Q140



Q145



Q160



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Supply Side Platforms

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Red Flags to address:

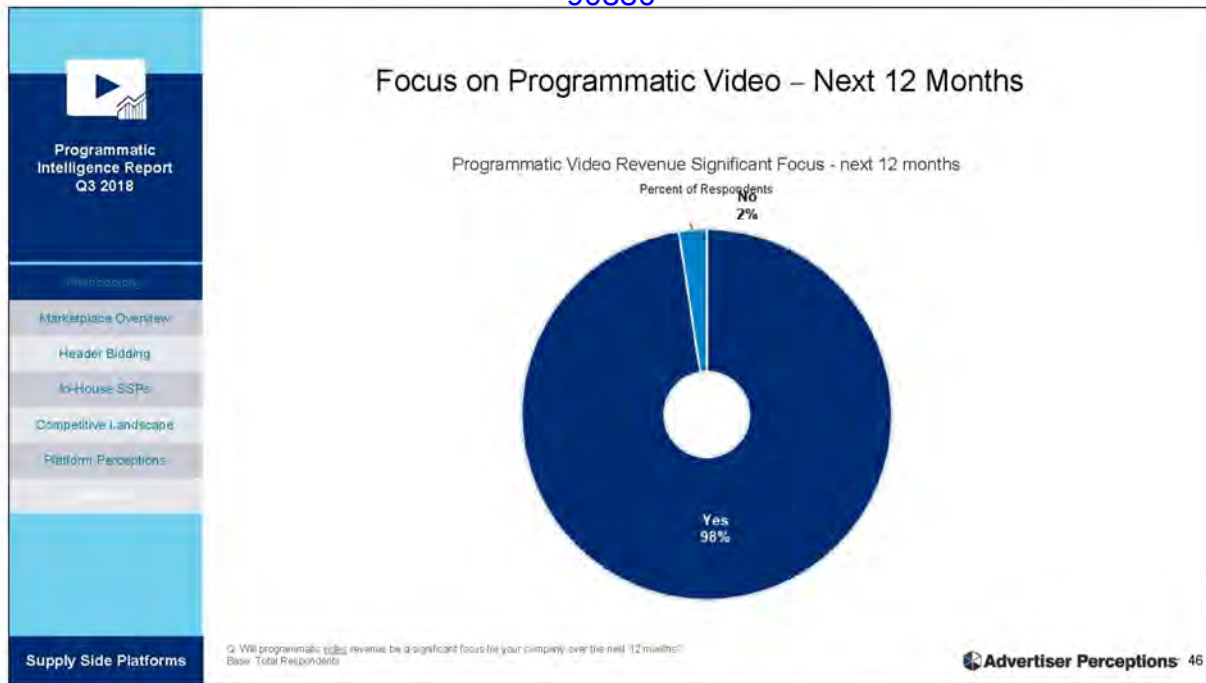
- Reporting
- PMP capabilities
- Header bidding capabilities
- Proactive partnership & alignment with pub goals

Who are you competing with?

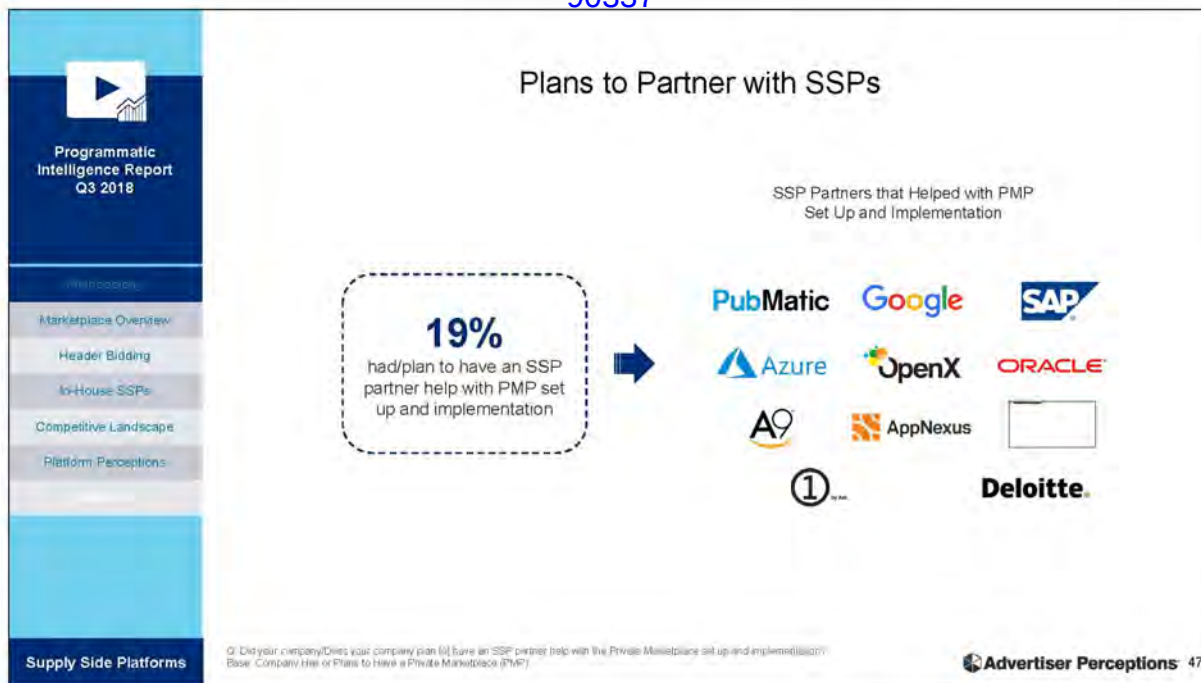
- In house initiatives?
- A blur of alternatives, including:
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- AppNexus, especially post Xander

 Advertiser Perceptions 44

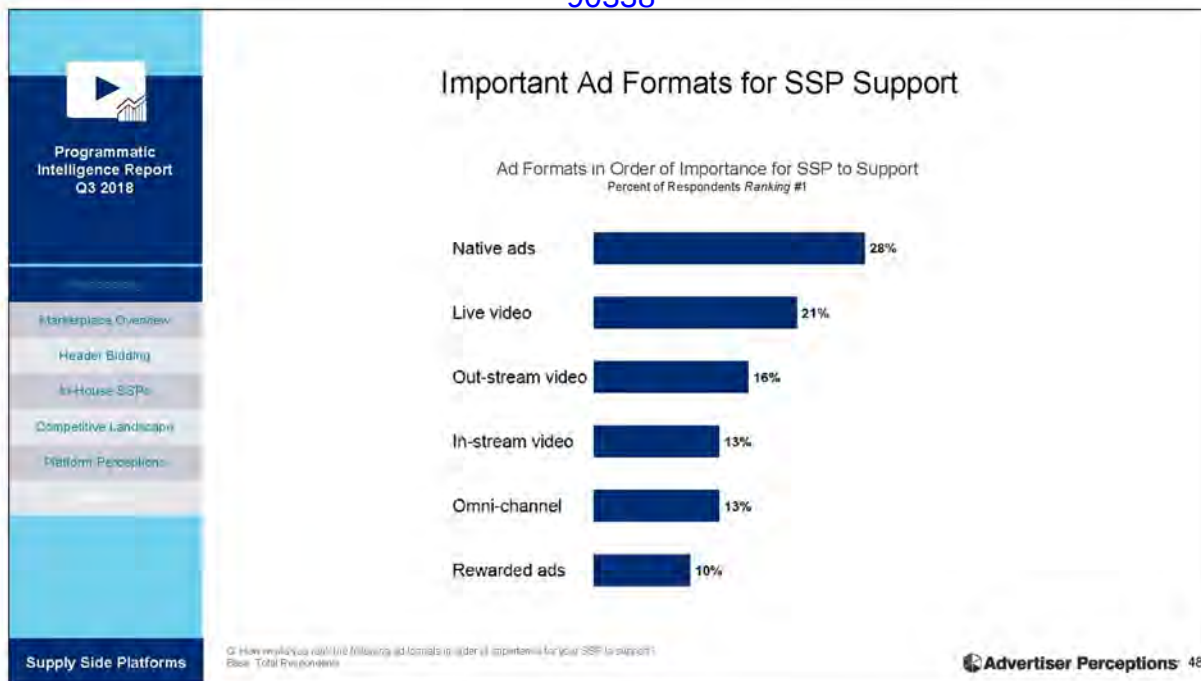




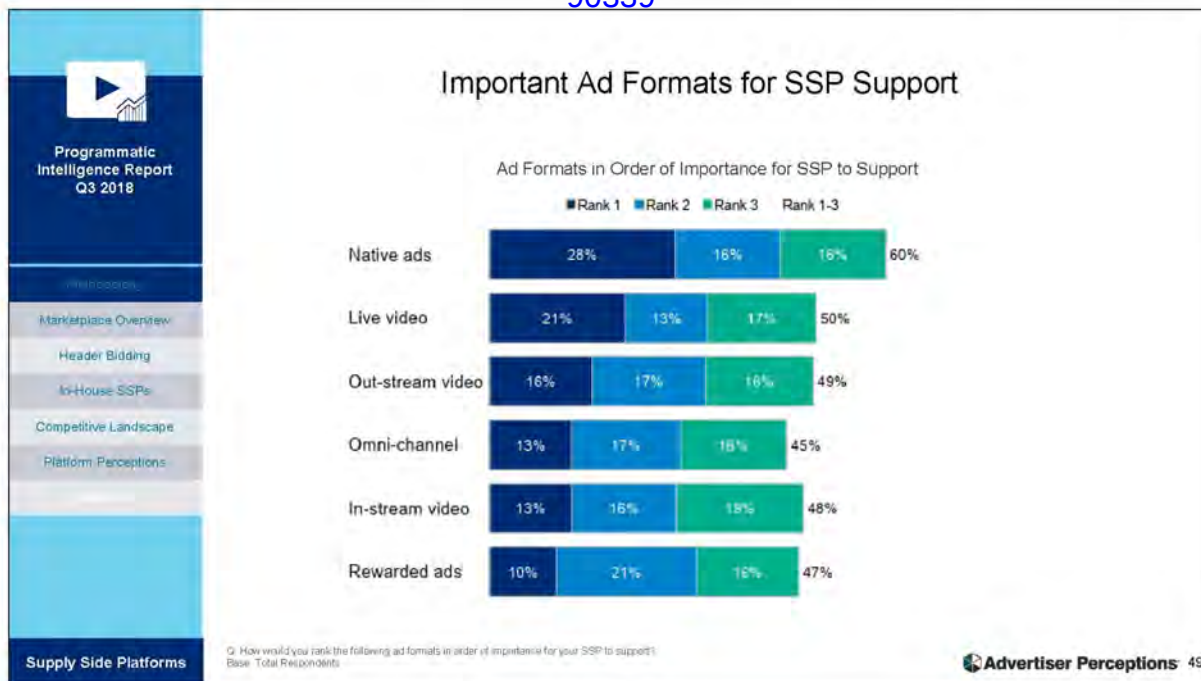
Q11c



Q16b



Q70



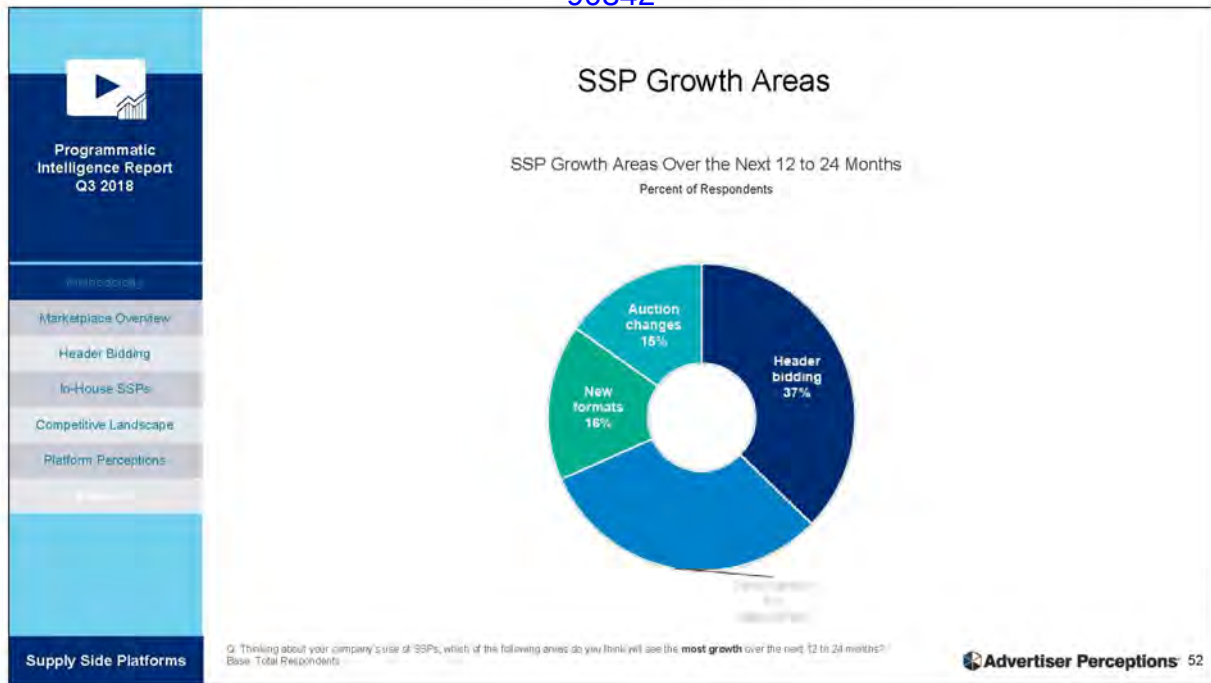
Q70




Q75



Q60




Q65



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- In-House SSPs
- Competitive Landscape
- Platform Perceptions
- Advertisers
- Supply Side Platforms

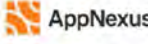
## What do the Most Preferred SSPs do or offer that makes them your primary choice?



*Simple interface and gives best value of impressions thus increases our revenue.*  
- **Director** (3 – 7MM)

*It integrates easily with many of our other platforms, which are also run by Google companies and/or subsidiaries. They are incredibly reliable & definitely a front runner in the race.*  
- **C-Level** (30-40MM)


*They have got best real time optimization solutions and are serving us brilliantly.*  
- **Director** (15 – 20MM)



*Product marketing transparency, track record with exact text and details that is apt to the content.*  
- **C-Level** (4 – 5MM)

*They have top notch solutions for content marketing also we have great experience with AppNexus in the past.*  
- **VP** (4-5MM)


*It has improved our marketing model performance and ROI within a year and gave access to new revenue streams.*  
- **VP+** (7 – 10MM)



*It ensures that the advertising network can serve graphic banners and video with maximum efficiency.*  
- **Director** (50MM+)

*They provide us full control over the complete media platform so that we can customize solutions as per our needs which in my opinion is the best part for making OpenX our media advertising partner.*  
- **Director** (10 – 15MM)

*They offer ultimate control over all programmatic functions and round the clock support.*  
- **Supervisor** (3-4MM)



*It is more reliable and flexible in comparison to others.*  
- **VP+** (3 – 4MM)

*It has enhanced our limit of advertising network and now we are serving mobile ads, graphic banners at maximum efficiency thereby increasing revenue.*  
- **Director** (5 – 7MM)

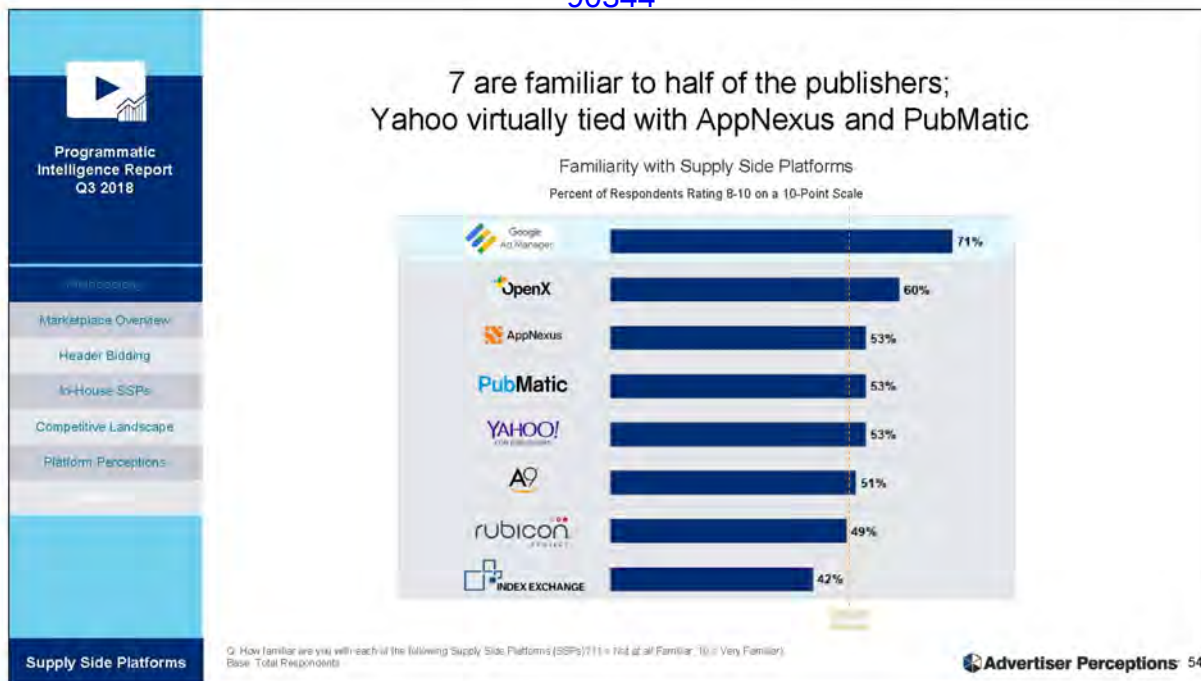
*It offers higher transparency and faster revenue generation in comparison to other SSPs.*  
- **Director** (3 – 4MM)

Q: What does [SSP NAME] do or offer that makes them your primary choice?  
Base: Prefer "SSP"

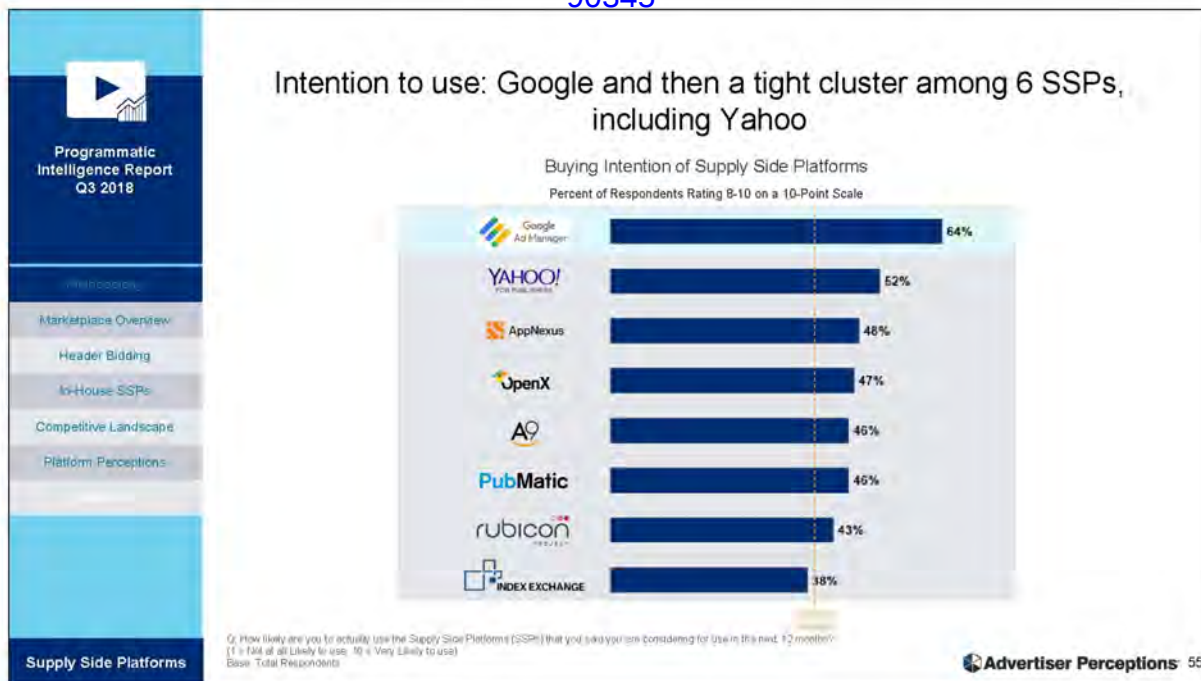
insights monthly across vendors

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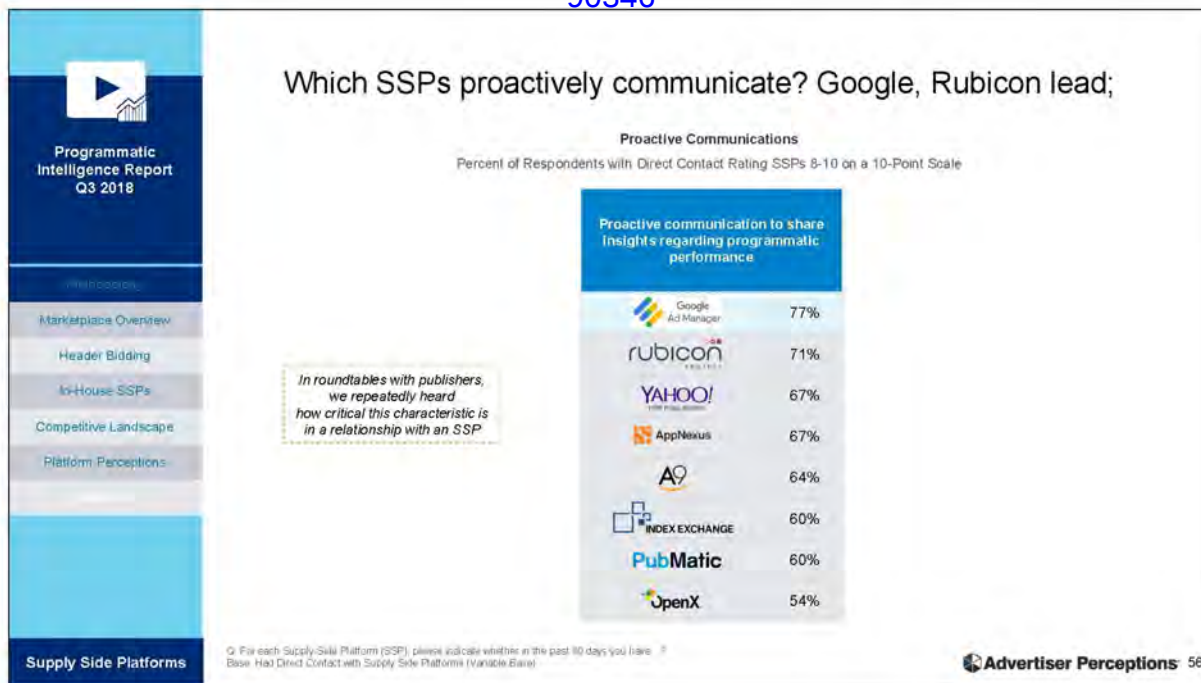
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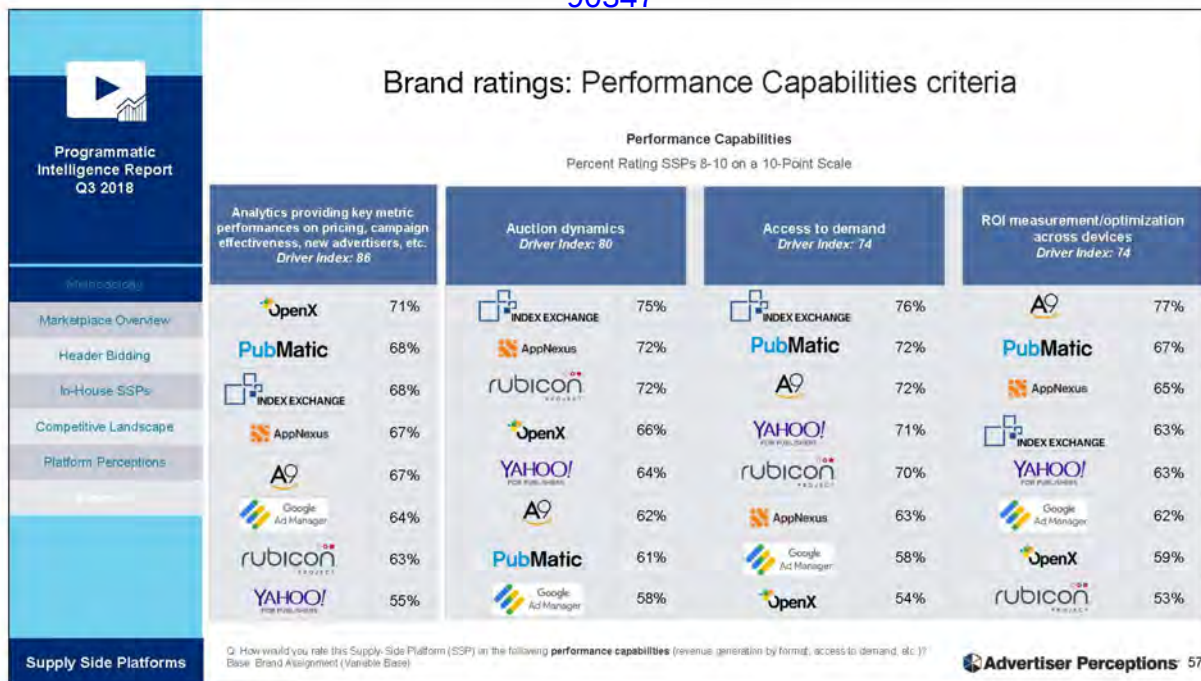
Q110



Q125



Q165



Q140

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Marketplace Overview

Header Bidding

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Platform Perceptions

Supply Side Platforms

# Brand ratings: Performance Capabilities criteria

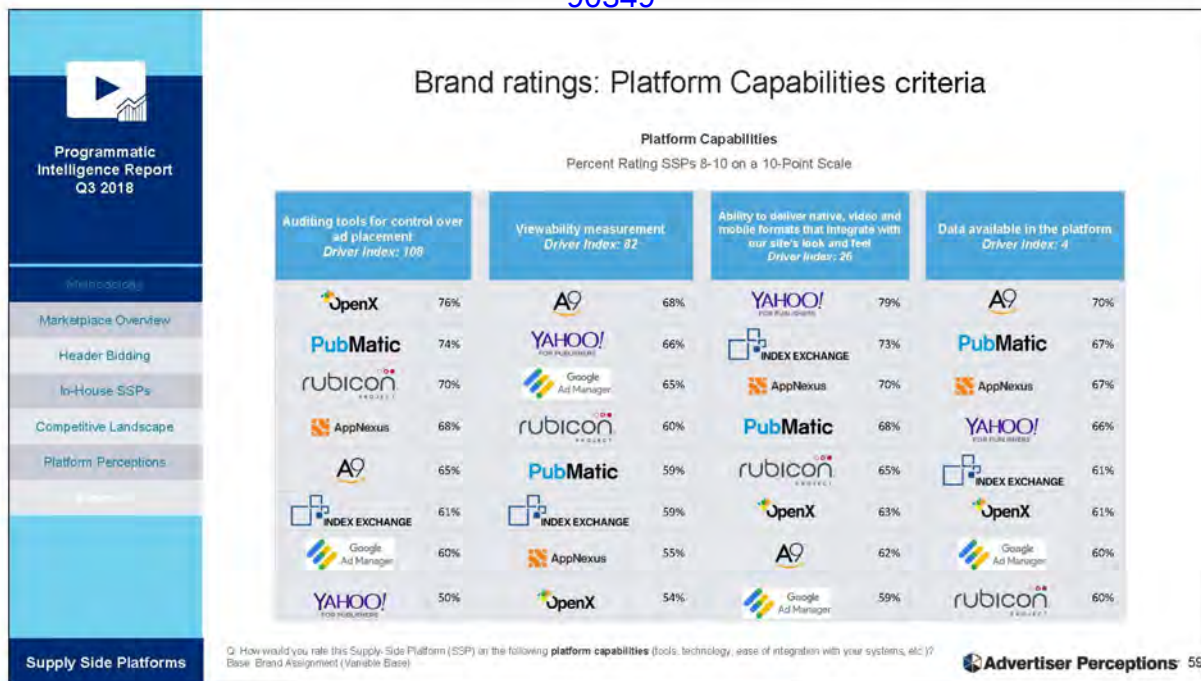
Index of Percent Rating SSPs 8-10 on a 10-Point Scale

Track record of protection against bad ads, bots, fraud	Availability of reporting	Analytics providing key metric performances on pricing, campaign effectiveness, new advertisers, etc.	Auction dynamics	Access to demand	ROI measurement/optimization across devices
MoPub 72%	MoPub 76%	Telaria 71%	Index Exchange 75%	Index Exchange 76%	A9 77%
Index Exchange 71%	SpotX 75%	OpenX 71%	AppNexus 72%	PubMatic 72%	Telaria 70%
Telaria 70%	PubMatic 74%	PubMatic 68%	Rubicon Project 72%	A9 72%	SpotX 68%
Google Ad Manager 69%	Yahoo for Publishers 71%	Index Exchange 68%	MoPub 69%	Yahoo for Publishers 71%	Teads 67%
Sharethrough 65%	Telaria 70%	AppNexus 67%	SpotX 68%	Rubicon Project 70%	PubMatic 67%
SpotX 63%	Rubicon Project 68%	A9 67%	Telaria 68%	MoPub 68%	AppNexus 65%
Yahoo for Publishers 59%	Teads 67%	Google Ad Manager 64%	OpenX 66%	Sharethrough 67%	Index Exchange 63%
A9 58%	OpenX 66%	Rubicon Project 63%	Yahoo for Publishers 64%	Telaria 66%	Yahoo for Publishers 63%
Teads 58%	A9 65%	SpotX 63%	Teads 62%	ONE by AOL 64%	Google Ad Manager 62%
OpenX 57%	AppNexus 65%	MoPub 63%	A9 62%	Teads 64%	OpenX 59%
Rubicon Project 57%	ONE by AOL 64%	Teads 62%	PubMatic 61%	AppNexus 63%	MoPub 57%
PubMatic 56%	Native 61%	Yahoo for Publishers 55%	Google Ad Manager 58%	Google Ad Manager 58%	Native 56%
ONE by AOL 53%	Index Exchange 59%	Native 54%	Sharethrough 54%	SpotX 56%	Sharethrough 54%
Native 50%	Google Ad Manager 59%	Sharethrough 51%	ONE by AOL 46%	OpenX 54%	ONE by AOL 54%
AppNexus 50%	Sharethrough 54%	ONE by AOL 51%	Native 41%	Native 54%	Rubicon Project 53%

Q: How would you rate this Supply-Side Platform (SSP) on the following performance capabilities (revenue generation by format, access to demand, etc.)?  
Base: Considering Supply Side Platforms (Variable Base)

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Q140



Q135

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### Platform Perceptions

## Brand ratings: Platform Capabilities criteria

Percent Rating SSPs 8-10 on a 10-Point Scale

Visibility into accurate, available inventory	PMP capabilities	Header bidding capabilities	Auditing tools for control over ad placement	Viewability measurement	Ability to deliver native, video and mobile formats that integrate with our site's look and feel	Data available in the platform	Flexibility of integration with our systems	Ease of use
Telaria 75%	PubMatic 75%	Index Exchange 80%	OpenX 76%	Telaria 77%	Yahoo for Publishers 79%	Telaria 73%	Index Exchange 75%	AG 76%
Index Exchange 75%	Yahoo for Publishers 73%	PubMatic 79%	Teads 75%	AG 88%	Index Exchange 73%	MoPub 72%	AppNexus 74%	OpenX 73%
MoPub 70%	Index Exchange 71%	MoPub 88%	PubMatic 74%	Teads 67%	AppNexus 70%	SpotX 72%	SpotX 68%	Google Ad Manager 73%
Yahoo for Publishers 70%	MoPub 70%	Telaria 88%	Rubicon Project 70%	MoPub 88%	Telaria 70%	AG 70%	Telaria 68%	PubMatic 72%
Google Ad Manager 69%	SpotX 70%	Rubicon Project 67%	AppNexus 68%	Yahoo for Publishers 60%	SpotX 68%	PubMatic 67%	Yahoo for Publishers 66%	Telaria 71%
AppNexus 69%	OpenX 64%	Yahoo for Publishers 66%	Telaria 68%	Google Ad Manager 65%	PubMatic 68%	AppNexus 67%	OpenX 68%	AppNexus 71%
Rubicon Project 65%	AG 63%	AppNexus 65%	AG 65%	SpotX 65%	MoPub 67%	Yahoo for Publishers 66%	Teads 67%	MoPub 71%
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Teads 64%	Telaria 83%	AG 62%	Index Exchange 61%	Rubicon Project 60%	OpenX 83%	Teads 62%	PubMatic 65%	Rubicon Project 65%
SpotX 63%	Teads 62%	SpotX 58%	Google Ad Manager 60%	PubMatic 59%	Teads 62%	Index Exchange 61%	AG 65%	ONE by AOL 64%
OpenX 63%	Rubicon Project 62%	ONE by AOL 58%	SpotX 60%	Index Exchange 59%	AG 62%	OpenX 61%	Rubicon Project 63%	Yahoo for Publishers 64%
AG 62%	ONE by AOL 56%	OpenX 56%	Sharethrough 60%	Sharethrough 56%	Google Ad Manager 56%	Google Ad Manager 60%	Native 57%	Sharethrough 63%
Sharethrough 56%	Native 56%	Sharethrough 49%	ONE by AOL 56%	AppNexus 55%	Sharethrough 53%	Google Ad Manager 60%	Sharethrough 54%	Index Exchange 63%
PubMatic 56%	Google Ad Manager 52%	Teads 49%	Yahoo for Publishers 50%	OpenX 54%	Native 46%	Sharethrough 53%	ONE by AOL 53%	Native 61%
ONE by AOL 54%	Sharethrough 51%	Native 44%	Native 39%	Native 43%	ONE by AOL 44%	Native 50%	Google Ad Manager 46%	Teads 56%

Q: How would you rate this Supply-Side Platform (SSP) on the following **platform capabilities** (tools, technology, ease of integration with your systems, etc.)?  
Base: Considering Supply Side Platforms (Variable Base)

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### Supply Side Platforms

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# Brand ratings: Partnership criteria

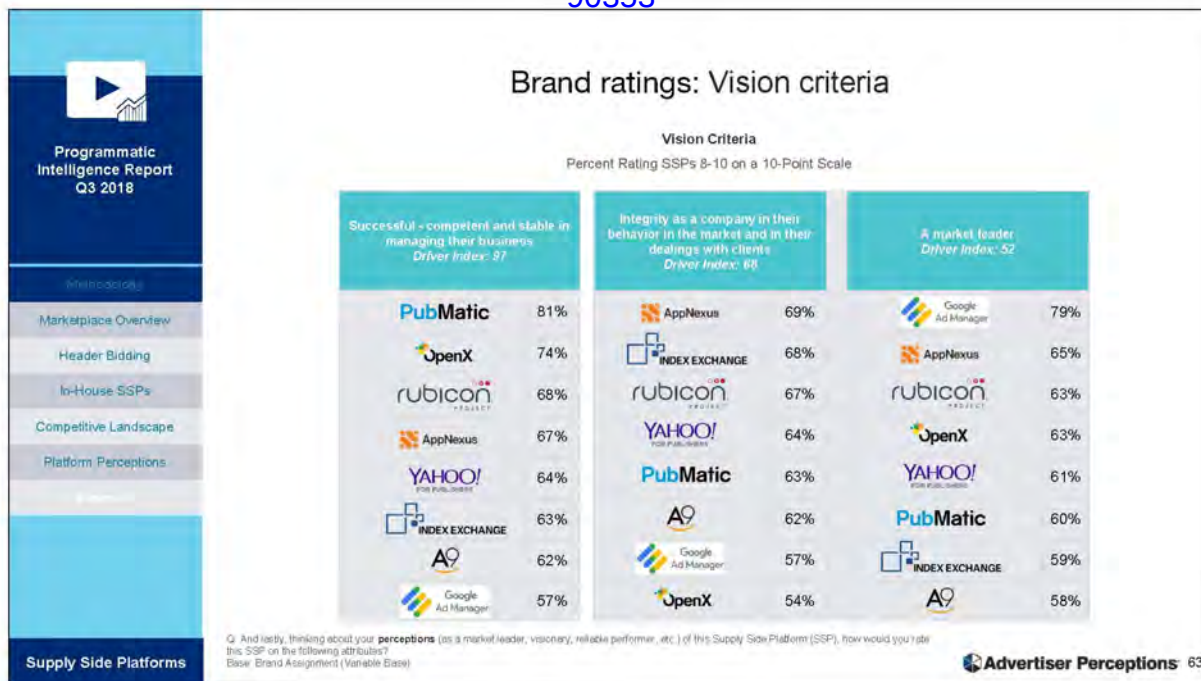
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Proactively share reports, analytics and insights that enable us to make better decisions	Alignment with publisher goals and needs	Make it easy for us to find the solutions or answers we need	Transparent and fair in fee structure	Sales skills	Operates with integrity	Technology expertise	Is easy to work with
SpotX: 74%	Index Exchange: 76%	PubMatic: 74%	MoPub: 74%	Index Exchange: 59%	Google Ad Manager: 71%	PubMatic: 77%	Google Ad Manager: 76%
Tealnia: 73%	Tealnia: 75%	SpotX: 70%	SpotX: 67%	AppNexus: 69%	Rubicon Project: 68%	MoPub: 74%	AppNexus: 74%
AppNexus: 72%	SpotX: 72%	Teads: 69%	Yahoo for Publishers: 66%	PubMatic: 68%	MoPub: 68%	ONE by AOL: 73%	A9: 70%
PubMatic: 68%	PubMatic: 72%	AppNexus: 67%	Google Ad Manager: 65%	MoPub: 67%	Yahoo for Publishers: 64%	OpenX: 73%	MoPub: 69%
Yahoo for Publishers: 68%	AppNexus: 66%	Yahoo for Publishers: 64%	OpenX: 64%	Tealnia: 66%	SpotX: 63%	SpotX: 67%	SpotX: 68%
Rubicon Project: 67%	Teads: 67%	Index Exchange: 63%	Index Exchange: 64%	Teads: 64%	Sharethrough: 63%	Sharethrough: 67%	Yahoo for Publishers: 68%
Teads: 64%	Yahoo for Publishers: 66%	MoPub: 63%	Rubicon Project: 63%	Rubicon Project: 63%	OpenX: 63%	Index Exchange: 68%	OpenX: 68%
A9: 63%	MoPub: 61%	Index Exchange: 59%	PubMatic: 63%	Yahoo for Publishers: 57%	AppNexus: 61%	AppNexus: 65%	Tealnia: 66%
Index Exchange: 63%	A9: 57%	Tealnia: 59%	AppNexus: 59%	Google Ad Manager: 57%	Tealnia: 61%	Rubicon Project: 62%	Teads: 65%
OpenX: 61%	Sharethrough: 56%	Rubicon Project: 56%	Tealnia: 57%	A9: 55%	Index Exchange: 59%	Native: 59%	Sharethrough: 65%
MoPub: 59%	Rubicon Project: 56%	Sharethrough: 56%	Sharethrough: 56%	SpotX: 54%	PubMatic: 56%	Teads: 58%	ONE by AOL: 64%
ONE by AOL: 58%	ONE by AOL: 54%	OpenX: 56%	A9: 55%	ONE by AOL: 53%	Native: 56%	Yahoo for Publishers: 57%	Index Exchange: 64%
Native: 56%	Native: 54%	Native: 56%	Native: 50%	OpenX: 52%	A9: 55%	Google Ad Manager: 57%	PubMatic: 63%
Google Ad Manager: 55%	OpenX: 52%	ONE by AOL: 54%	ONE by AOL: 49%	Sharethrough: 49%	ONE by AOL: 54%	A9: 57%	Rubicon Project: 62%
Sharethrough: 53%	Google Ad Manager: 48%	A9: 50%	Teads: 47%	Native: 48%	Teads: 47%	Tealnia: 50%	Native: 57%

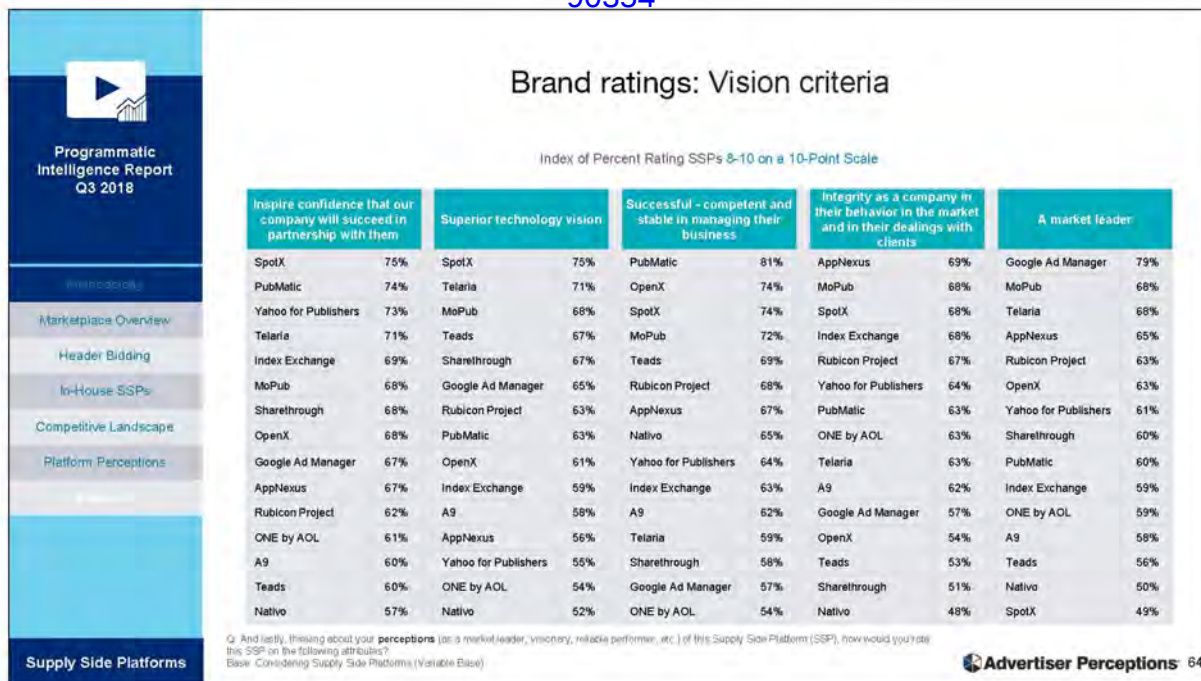
Q: How would you rate this Supply-Side Platform (SSP) on the following attributes related to partnership (business relationship, proactive attention to your goals, insights and recommendations, etc.)?  
Base: Considering Supply Side Platforms (Variable Base)

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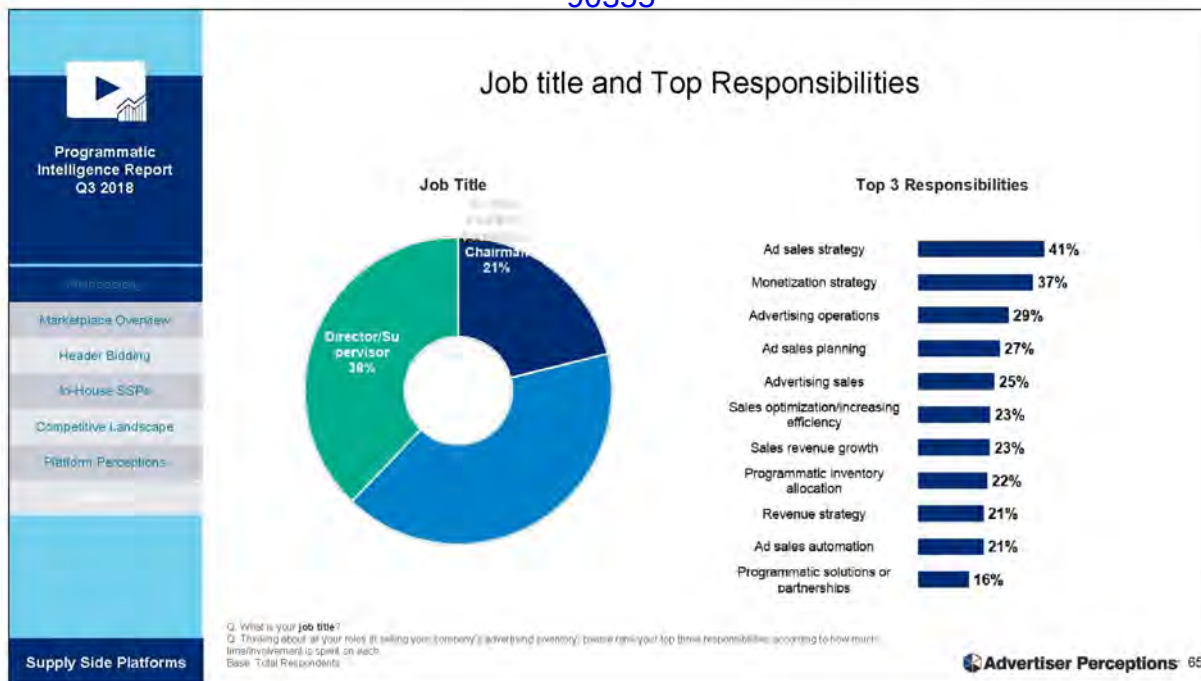
Q145



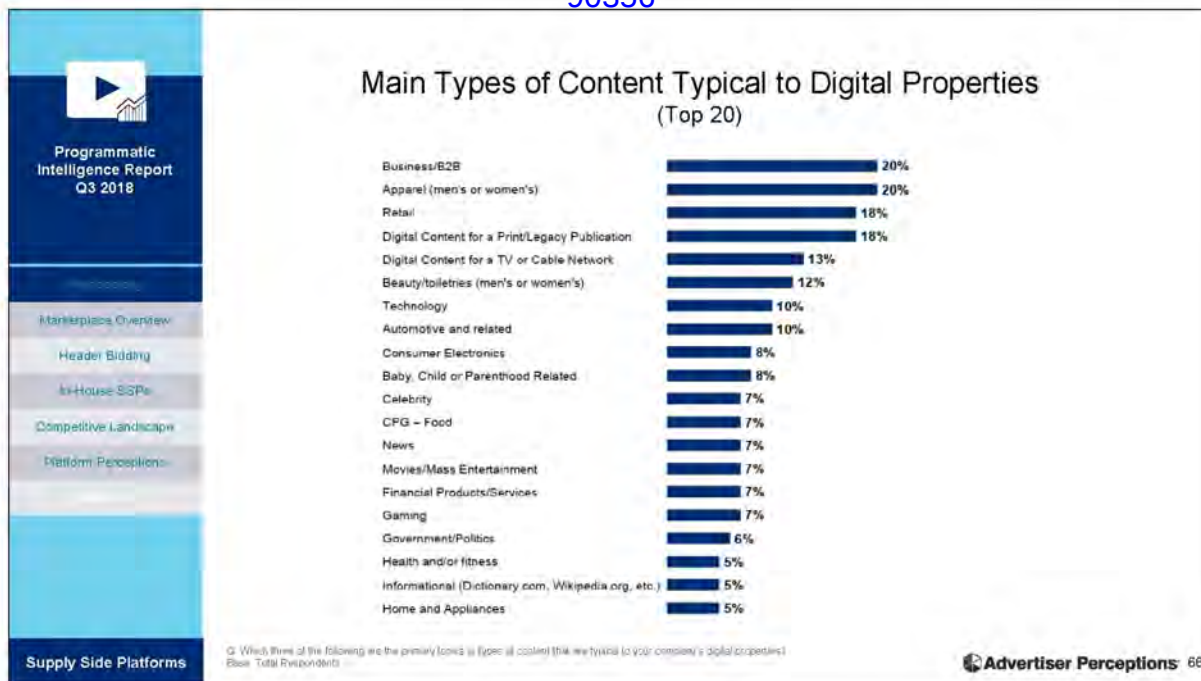
Q150



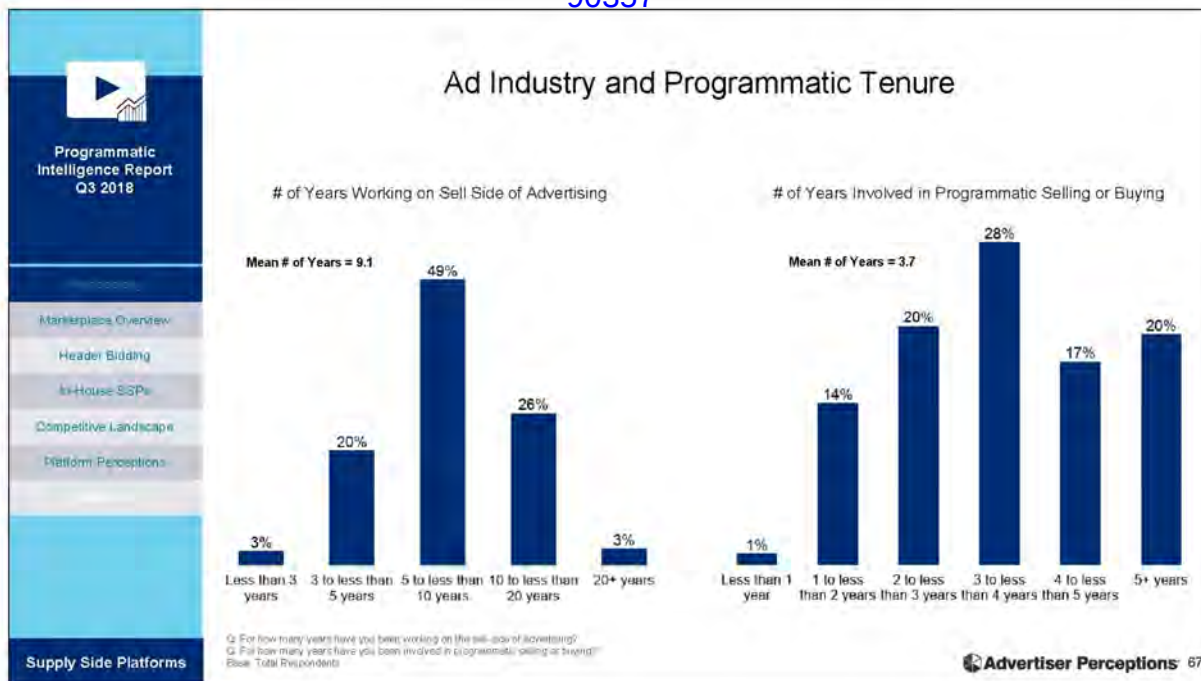
Q150



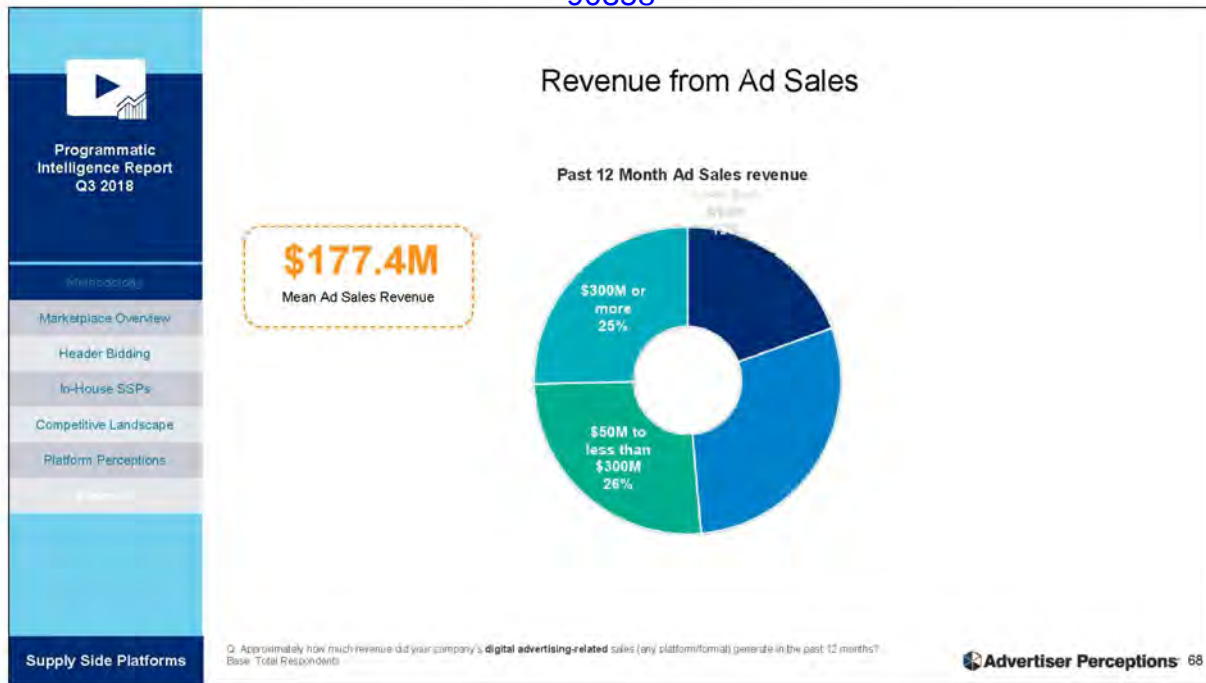
S32, S200b



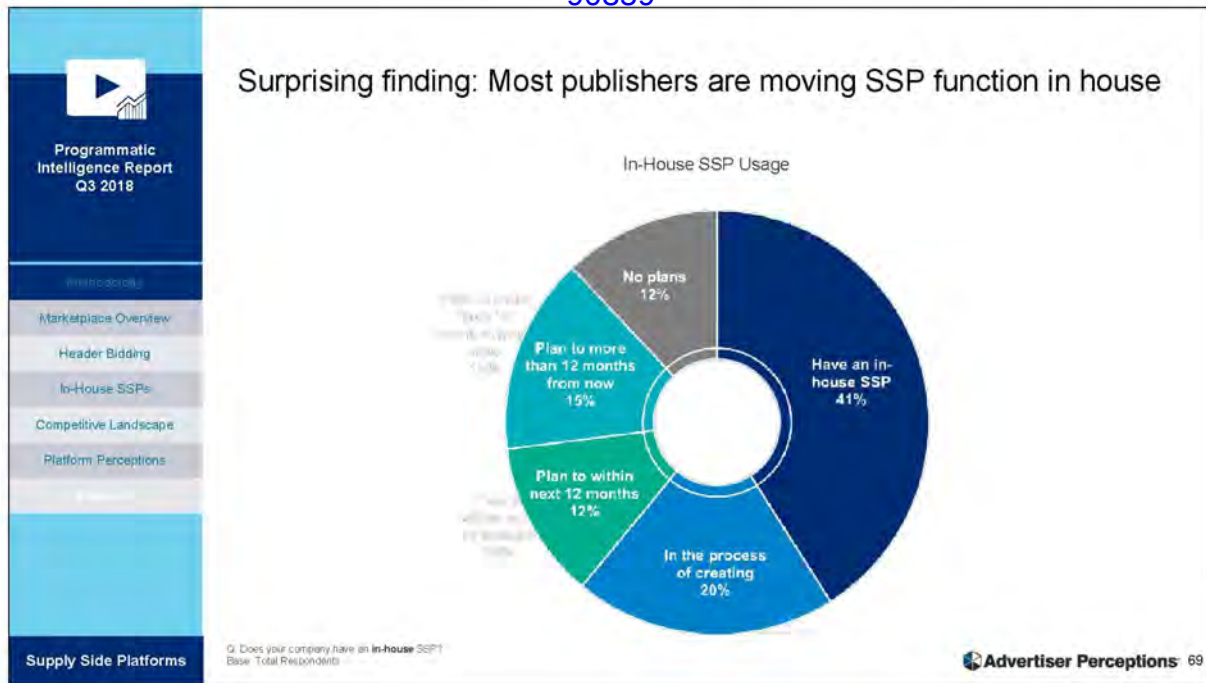
Q220b – Primary Involvement



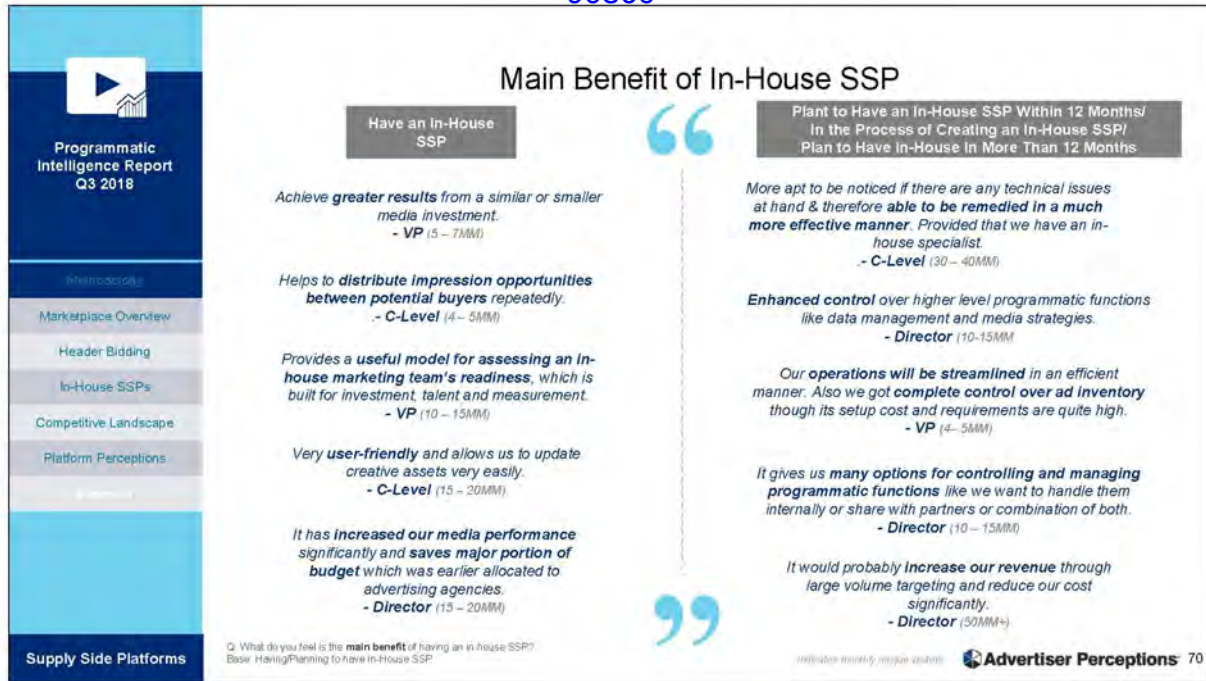
Q240, Q245



Q210



Q67a



Q67b



**Programmatic Intelligence Report Q3 2018**

- Introduction
- Marketplace Overview
- Header Bidding
- In-House SSPs
- Competitive Landscape
- Platform Perceptions
- Supply Side Platforms

## Main Reason for Not Having an In-House SSP

**“**

We do not have any plans to have an in-house SSP as it would **require expertise** to keep up with the technical environment and increase our expenses substantially.

- VP+ (3 – 4MM)

We do not have the **required planning, talent, money or platform** to implement an in house SSP.

- Director (4– 5MM)

We have **very limited needs** which are successfully fulfilled by our media partners so no plans to invest further more in developing in-house SSP.

- Supervisor (10 – 15MM)

Implementing in-house SSP **requires a lot of time** to achieve **operational readiness**, planning and platform testing.

- Director (5 – 7MM)

We are **completely satisfied with our current media ad partners**. Also opting for in-house SSP requires a lot of internal operations evaluation and extra budget.

- Director (10-15MM)

It **requires a high investment** initially and we do not have budget to spend on setting up in-house SSP.

- Supervisor (5 – 7MM)

All **needs have been successfully fulfilled** by our online ad partner.

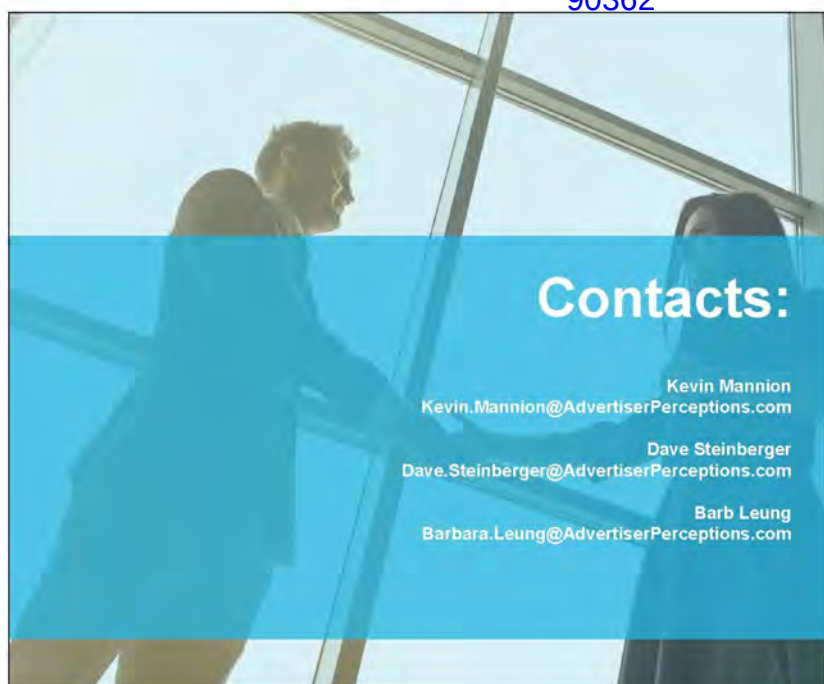
- Director (3 – 4MM)

**”**

Q: What is the main reason why your company has no plans to have an in-house SSP?  
Base: Not planning to have in-house SSP

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Q67c




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**What Advertisers Think™**

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